Lecture
ON A
CASE OF INTRACRANIAL SYPHILIS.[1]

BY
J. HUGHLINGS JACKSON, M.D., F.R.C.P., F.R.S.,
PHYSICIAN TO THE LONDON HOSPITAL, AND TO THE NATIONAL HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

HENRY C——, aged thirty-eight, was first seen on Feb. 17th, 1877. (For the notes of this case I am indebted to Mr. Richard Atkinson, my late house-physician.) The patient had paralysis of the fifth and sixth nerves, both of the right side. Before that he had had first severe headache, and then paralysis of the right third nerve. Later still, on March 7th, he was admitted as an in-patient for left hemiplegia, the paralyses of the fifth and six remaining. He recovered from the hemiplegia. So we have to consider four symptoms—(1) headache; (2) paralysis of the right third nerve; (3) paralysis of the right fifth and sixth nerves; (4) hemiplegia. We believed all these symptoms to be owing to syphilis.

I may at once give the evidence of syphilis in this case. Six years before admission the patient had a chancre, but we have no history of any secondary or tertiary symptoms (unless the nervous symptoms are to be so called), with the exception of the following:—He had on his second admission a rounded swelling on the left side of his chest, and another on the thigh; these were probably cellular nodes; they disappeared under the iodide of potassium; he had had several before that date, some of which had suppurated. That the nervous system suffers from syphilis no one nowadays disputes. All the more reason that we should never forget our debt to Reade of Belfast, who was, I suppose, the earliest worker in the subject in this country, and whose first researches were, I believe, received with great incredulity.

I wish to impress on you in this lecture that we may sometimes correctly diagnose a nervous affection to be syphilitic *from the style of the nervous symptoms themselves*, when the direct evidence of syphilis itself is vague or even *nil*. We shall assume that the evidence of syphilis in this case is uncertain, or, better still for our purpose, we shall ignore it; ignore it, that is to say, for a clinical study in order to bring into relief the evidence from the nervous symptoms themselves. It goes without saying that the best evidence that there is intracranial syphilis in any case of nervous disease is supplied by the ordinary outward signs of syphilis. But if a young man has such a symptom as paralysis of a motor cranial nerve along with a hole in his palate, it is an abuse of language to say that *we* diagnose intracranial syphilis to be the cause of his local paralysis; the case diagnoses itself. If he have a tender frontal node, the diagnosis is, metaphorically speaking, written on his forehead. There is more reason to urge caution in some cases. If a man's body does present unequivocal signs of constitutional syphilis, we must not, if he be past middle age, hastily conclude for intracranial syphilis if his nervous symptom be that very common one, hemiplegia coming on without convulsion and without loss of consciousness; it may be local softening from thrombosis of an atheromatous cerebral artery.

Observe, no single nervous symptom is diagnostic of syphilis. This is Dictum No. 1. But some groupings and successions of certain symptoms are very strong evidence in favour of it. This is Dictum No. 2, of which more anon. We are, however, occasionally misled by trusting to this kind of evidence, as I know to my cost. We have recently had under care a woman in whom there was such a grouping of different symptoms as led me to think there was intracranial syphilis; there was, however, but one lesion of the cerebellum found post mortem. I shall shortly report this case, with a careful examination of the encephalon by Dr. Gowers. But in the absence of signs of syphilis the "style" of the nervous symptoms is the only evidence we have to rely on. In the case of a married woman we must be careful not to ask questions which might lead her to suppose that her husband had brought on her, and perhaps on her offspring, so great a calamity as constitutional syphilis. The history of miscarriages or of very early deaths of children, or the presence of signs of congenital syphilis in children, sometimes supply indirect evidence of syphilis, confirming what the style of their parents' nervous symptoms suggests.

There is a third dictum. Most nervous symptoms "caused by syphilis" result very indirectly from syphilis. This Dictum No. 3 is very important with regard to therapeutics.

I will now consider our patient's symptoms *seriatim*. But I do not intend to keep rigidly to this case. It is a delusion to suppose you can properly understand syphilitic affections of the nervous system unless you see the symptoms in relation to other symptoms not caused by syphilis. No one is fitted to *begin* the *special* study of syphilitic affections of the nervous system until he has well studied nervous diseases in general.

Headache.—Our patient's illness began about two years before we saw him. It began by one of the most important of all nervous symptoms—viz., severe headache. At first it was a dull, heavy pain. About eight months before his admission the pain became more severe, and about this time he had, judging from the account he gave, paralysis of the right third nerve. The presumption is that he was then treated by anti-syphilitic remedies, for the paralytic symptom passed off; it did not return. But the best time for treatment of his case was months before this local symptom appeared—that is, in the earlier stage of headache. The pain in the head may signify syphilitic disease of the cerebral membranes, or a syphilitic osteitis, or both. The presumption is that, at any rate, it was syphilis beginning its nervous campaign. It was, no doubt, the earliest sign of cranial or intracranial syphilis, and should have been treated promptly. But patients very often neglect headache until the pain is excessive. They explain their headaches away as being owing to disorder of the liver, &c. I often tell you, perhaps with exaggeration, that severe headache is the worst nervous symptom a patient can have. It is not only bad in itself, but it is an evil sign of worse to come. I will take this opportunity of speaking of it again. Suppose an acute case of cerebral illness, in which there is partial aphasia and intense headache. So far as diagnosis of the gravity of the case and consequent prognosis go, the severe headache is of infinitely more consequence than the aphasia. The aphasia points to cerebral disease, but the intense headache too often points to fatal cerebral mischief. The aphasia may be a symptom of tubercular meningitis in such a case. Never underrate headache. No one has any business to have a severe headache. In Erewhon what we call crimes were treated as diseases, and diseased persons were brought before the courts as criminals. A well-educated judge in Erewhon would, I think, pronounce a severe sentence on anyone who had intense headache in an acute illness, especially if it were at the back of the head or on one side—a far more severe sentence than on anyone who had paralysis of a motor cranial nerve, hemiplegia, aphasia, or epilepsy without intense headache. We must not take too nervous a view of nervous diseases by exaggerating the importance of "interesting symptoms" like aphasia, and underrating such as headache and vomiting. I except cases of migraine, of course; these are cases of misery rather than of danger. One speaks of severe headache in persons not accustomed to it. Let me impress on you the importance of treating what I may briefly designate "syphilitic headache" by an illustration. When, as is not uncommon, a patient has, from syphilis, unilaterally beginning convulsions (epileptiform seizures), there is a gumma involving some part of his cortex cerebri. The gumma exists there before the first fit occurs. One day the patient has the first fit of a series, but before that day the gumma was slowly growing and damaging the brain, making it ready for the production of a fit. There is at any rate often a stage of pain in the head corresponding to the growing of the gumma, and prior to the first fit. Most likely were the headache "attacked" promptly by remedies, the early changes leading on to the gumma would have been reversed, and thus the patient would have had no convulsion. Remark of syphilis that we can beneficially interfere with *changes going on*. It is when the pia mater and other membranes are in a condition analogous to that

[1] This lecture was delivered some time ago. I have not hesitated to make additions to it, and to refer to more recent cases.

in acute iritis that our drugs do good, and not when these membranes are in a stage the analogue of occluded pupil from bygone iritis. Large doses of the iodide of potassium or mercurial treatment quickly rid the iris of the new morbid products of acute iritis, but no drugs will get rid of old iritic adhesions. It is, then, when the patient comes with headache, especially if the pain be on one side of his head, that we may reasonably hope to do much for him. When, some time later, the patient is "well" of this, and has become subject to epileptiform convulsion, beginning in some part of the opposite side of the body, there is less hope. What we have called his being "well," is being rid of pain, not of the gumma, whose growth was attended by pain. We may, perhaps, say that the changes have become "latent," to appear again in producing trouble later on—e. g., an epileptiform seizure. When an epileptiform seizure is produced by a gumma, the gumma is to be then looked on generally rather as a "foreign body," as one of a class all of which produce secondary changes of instability in neighbouring grey matter, than individually as a *syphilitic* product to be absorbed. We have first, I believe, active syphilitic changes attended by local pain, then a mass the result of them (an aggregate of slow changes), which mass when formed acts like any other mass, for example just like a glioma, and may produce an identical convulsion, or, rather, produce changes of instability in grey matter (a discharging lesion), like those produced by a glioma. It also produces just the same kind of optic neuritis as a glioma or any other kind of adventitious product may do.[2] At the same time there is pain, pain again. We must try to distinguish the earliest local pain during the actual acute syphilitic change, from the diffused pain, which latter may, along with optic neuritis, follow as a secondary result from the formed gumma, which when formed is a foreign body, and leads to the same symptoms as any other foreign body (glioma, &c.) similarly placed. Neither the optic neuritis nor the convulsion (or rather the local changes of instability of which the convulsion is the outward sign) are syphilitic, but the indirect results of the action of a syphilitic mass. Here is a very good illustration of the Dictum No. 3. "*Most syphilitic nervous affections are very indirectly owing to syphilis.*" We shall say more on this later on. Of course you try to absorb syphilitic masses, but very often you fail. Besides, you must never forget that the convulsion depends on secondary changes in grey matter, which, so to speak, becomes autonomous; there is established what I call a "discharging lesion." You must then give anti-epileptic, as well as anti-syphilitic remedies. Remembering the grave significance of the symptom severe headache, treat it by iodide even when you are in doubt as to its syphilitic causation.

Paralysis of the third nerve.—The first striking nervous symptom, but not one practically more important than the headache, was doubtless paralysis of the right third nerve, July, 1876. He got rid of this by treatment at Moorfields Hospital. Paralysis of the third nerve suggests syphilis; after or along with severe headache in a chronic case it suggests it very strongly. I say in a chronic case, to exclude basilar meningitis, in which, however, I have not yet seen clean-cut paralysis of but one third nerve, as the only cranial nerve affected. If there were not headache we should investigate more widely. We should run over the possible causes of this paralysis. I will mention some. There might be a non-syphilitic tumour compressing or involving the nerve—this is rare and could only be inferred from other symptoms of tumour, such as double optic neuritis,[3] severe headache, and urgent purposeless vomiting. Yet if these three symptoms existed with paralysis of the third nerve, there might be a syphilitic neuroma of the trunk of that nerve, and also a syphilitic mass in the cerebrum or in the cerebellum. In fact, syphilis would be the most likely cause of the symptoms. So I think, instead of using the word inference, we should say that the diagnosis of non-syphilitic tumour in such a case, in the adult, would be little better than a lucky guess. I remind you that I am not speaking of cases which "diagnose themselves." Especially should we search for symptoms of locomotor ataxy. Paralysis of the third or sixth nerve is not an uncommon forerunner of locomotor ataxy. If the patient be a woman, this sequence is improbable. Suppose the sex is masculine, you ask about "lightning pains;" if the patient has these he is already in locomotor ataxy. You must not be misled by the name; you may have locomotor ataxy without any ataxy of locomotor, just as you may have paralysis agitans without any agitation. Hence it is better perhaps to call the former "tabes dorsalis," and the latter, as Charcot has suggested, "Parkinson's disease." Westphal, Erb, Grainger Stewart, Buzzard, Gowers, Byrom Bramwell, James Russell, and others, have pointed out that in tabes dorsalis patellar tendon-reflex is nearly always wanting. Of the truth of this there is not the smallest doubt. Westphal and Erb have presented us with a most valuable aid to the diagnosis of tabes dorsalis in what I may call the pre-ataxic stage of this disease as well as in the ataxic stage. The reflex may be absent before disorderly gait appears. Buzzard, in his recent lectures, and in his lectures in 1878, insists strongly on this. Thus you should test the knees in every case of ocular palsy, whether this be intra-ocular or extra-ocular. I spoke above of the absence of headache, but of course a patient with tabes dorsalis might have headache. Moreover, Pierret and Buzzard have drawn attention to the fact that in some cases of tabes there are "lightning pains" about the head; these must be distinguished from headaches of more ordinary kinds. We now pass to another possible cause of paralysis of a third nerve. We should consider, especially in a young person, the possibility of aneurism at the base. For evidence of such a condition we should examine the heart, because aneurisms of the larger cerebral arteries frequently occur with vegetations on the heart's valves (John W. Ogle, Church, Goodhart). I have always found vegetations in these cases since, after reading Ogle's and Church's observations, I looked for them. However, such aneurisms are rare, and are rare causes of paralysis of the third nerve. A year or two ago we had in this hospital an old woman who was sent in for paralysis of one third nerve; one day she became suddenly apoplectic from meningeal hæmorrhage, owing to rupture of an aneurism of the posterior communicating artery, which aneurism had compressed the third nerve and paralysed it.

Suppose you cannot determine the cause of this local paralysis. The rule is, treat for syphilis, when *any* nerve-trunk, cranial or spinal, is anyhow affected; whether there be localised pain, paralysis, or anæsthesia, if in any doubt about syphilitic causation. Remark, I say, nerve *trunks*. I am not now speaking of paralysis, nor of anæsthesia, nor of tremor, nor of wasting of parts owing to disease of nerve-*centres*. So far we have only spoken of the facts supplied by the patient's history.

Paralysis of fifth and sixth nerves.—On Feb. 17th, 1877, I first saw him as an out-patient. There was at that time, besides headache, well-marked paralysis of the fifth and sixth nerves, both of the right side. We considered each of these symptoms in detail when the patient was before us, and need say little further of them now as individual paralyses. I may assume that you know the symptoms of each of these varieties of paralysis. I may remind you, however, of two little things. The patient could not open his mouth widely. I suppose this was from contraction of the paralysed and wasted masseter and temporal muscles. He complained that he could not bite so well on the right side. You could almost "see" paralysis of the fifth nerve in this case by the hollow in the right temple and the flattening on the right side of the patient's face.

Paralysis of *two* such cranial nerves on *one* side is by itself strong evidence of intracranial syphilis, especially strong when they come on in a man who has had paralysis of such another cranial nerve as the third. Mark, I say on one side, and, of course, I am assuming that there is no paralysis of the limbs on the other side. If there were, the case would not be one of disease of nerve-trunks, but of nerve-centres, or certainly of nerve-centres also. Hutchinson teaches that syphilitic paralyses of cranial nerve-trunks are rarely symmetrical, and especially that double paralysis of the fifth nerve is rarely caused by syphilis. With this my experience agrees. On more than one occasion Mr. Hutchinson has correctly diagnosed cancer of the base of the skull as the cause of double paralysis of the fifth nerve. Very recently I made a similar diagnosis in a case of double paralysis

[2] I may here remark that Buzzard agrees with me in the opinion that when a unilaterally beginning convulsion occurs in a person who has also double optic neuritis, there is in all probability local *syphilitic* disease of the brain; we are both of us aware that the disease may be a non-syphilitic growth. I have published cases of this kind, Lond. Hosp. Rep., vol. iv., 1868.

[3] Strictly speaking, optic neuritis is not a symptom; it is a pathological condition. This is not a pedantic refinement. Over and over again do we see this pathological condition without any attendant symptom; the patient may read the smallest type.

of the fifth (with paralysis of other cranial nerves); perhaps it ought to be said that that case "diagnosed itself," as there was a mass to be felt behind the soft palate. This, along with certain evidence of intracranial disease, left little for diagnostic acumen (cancer of the base of the skull coming through was found on post-mortem examination). If further evidence favours Mr. Hutchinson's opinion we shall gain a valuable aid to the diagnosis betwixt intracranial syphilis and cancer of the basis cranii. Cancer of the base of the skull, paralysing cranial nerves, is the thing most likely to be mistaken for syphilitic disease of cranial nerve-trunks. Of course it is not asserted that double paralysis of the fifth nerve is not sometimes caused by syphilis. Dr. Althaus has published such a case.

When it is said that syphilitic paralyses of cranial nerves are rarely double, those cases are meant in which the nerve-trunks are affected. Of late years Mr. Hutchinson has described cases of paralysis of all the ocular motor nerves supplying the two eyeballs under the name "exophthalmoplegia externa." He believes that these are really cases of muscular atrophy due to central changes similar to those found in the anterior horns of the cord in the commonest variety of the progressive muscular atrophy of Duchenne and Aran. Indeed, in one of Hutchinson's cases, Gowers (to whom the specimens were given for examination) found atrophy of the nuclear origin of the nerves.[4] Gowers writes: "The degeneration of the nerve-roots and disappearance of the nerve-cells from their nuclei of origin, are precisely similar to the changes seen in other parts in progressive muscular atrophy." Further, Hutchinson believes that syphilis is probably one cause of the central changes in these total and symmetrical ocular palsies; in other words, Hutchinson's opinion, then, is that syphilis may paralyse the ocular muscles, not only, as is most common, by leading to gummatous disease of their trunks, but by leading, probably without gummatous disease, to atrophy of the cells of their nuclear origin. Now, in my patient the palsies were of one side, the trunks of the nerves were beyond question the parts diseased.

There was another symptom in this case, owing to the paralysis of the sixth nerve, besides strabismus. He would see double, of course, but there was a more important symptom. When the man walked he walked well, but he could be easily made to walk with a slight reel, so that we may amend our statement and say that another symptom could be easily developed. When he walked as he liked, he closed the right eye; then his gait was normal.

It might seem at first glance that he walked well when, by closing the right eye, double vision was impossible. If, however, he was made to walk when the sound eye was closed, and the lamed one was alone used, he reeled slightly, at the same time he felt giddy. Two things are to be mentioned. He did not walk badly from double vision, for double vision was impossible when he walked with but one eye open, but when he used the lame eyeball only there would be erroneous estimation of the position of objects, and this, to speak metaphorically and not very exactly, misled his locomotor movements, and made him reel. Here let me guard you against a not uncommon confusion. The man felt giddy, but we must not say that the sensation of giddiness "caused" the disorder of locomotion. Giddiness is a sensation—a crude one, no doubt, but still a sensation or a feeling, and thus a psychical state—which is never the cause of anything physical; we could only say that the physical process during the feeling of giddiness leads to the further physical process of disorder of locomotion. We may more properly say, I think, that the *physical basis* of giddiness is itself incipient or rudimentary disorder of co-ordination. Ocular giddiness, or, more technically, vertigo, is a variety of desorientation, is, physically, defect in adjustment of the body to its surroundings by the most representative of all movements, those of the eyes. In ocular vertigo, to speak figuratively, the eyes see things in wrong places—that is, where the legs cannot find them; or, speaking more metaphorically, the eyes tell lies to the legs, which are thus misled to place themselves where the floor or other external objects are not.

Giddiness with the reel was not strictly another symptom, except in the very limited sense of being, in addition to the double vision, another manifestation of the paralysis of the sixth nerve. In many cases of paralysis of one sixth nerve there is neither double vision nor vertigo; the patient either instinctively closes the eye on the side of the external rectus paralysed, as our patient did; or he inclines his head to one side, and thus "dodges" the effects of that paralysis. When you see a patient walking with his head on one side, or with one eye closed, you examine for paralysis of one sixth nerve. Paralysis of the sixth nerve from any morbid process would of course produce vertigo and reeling, and thus it may seem that we are going out of our way in considering these symptoms in a lecture on syphilis. Yet they are properly mentioned here, as it would be a grave error to suppose that the man's reel or vertigo was an additional symptom, betokening another lesion. This is important because, as I shall insist later on (Dictum No. 2), a random association of different nervous symptoms is strong evidence of syphilis. Vertigo is a very different symptom from paralysis of a cranial nerve; but we see that here it is only an indirect consequence of paralysis of the sixth; it is not *another* symptom in the sense of depending on another separate lesion.

Treatment by large doses of the iodide of potassium, I may mention, did nothing for the paralysis of the sixth nerve, and little for that of the fifth. These palsies had existed too long; there was much less anæsthesia of the right side of the face, however. Mr. Hutchinson some time ago told me of a case in which, under long-continued doses of the iodide of potassium, the masseter and temporal muscles, which were seemingly atrophied as a part of a fifth nerve paralysis from syphilis, plumped out again and acted normally. I have since seen with Mr. Hutchinson a case in which under similar treatment paralysed masseter and temporal muscles, in another case of paralysis of the fifth nerve from syphilis, nearly completely recovered. (I may mention that in this case the depression in the temporal region and the flatness of the cheek in the regions of the temporal and masseter muscles had made me infer paralysis of the fifth before a proper examination rendered it certain.) Hence I have misgivings that I did not give enough iodide, or give it long enough, in the case I am now relating. Most unfortunately I have no mention of the exact duration of the paralysis of the fifth nerve; the sixth had been paralysed for about four months. The patient may have had the paralysis of the fifth nerve as long; some patients do not know that they have this kind of paralysis; some who have it go to an ophthalmic hospital for ulceration of the cornea on the paralysed side, and it is then pointed out to them that one side of the face is without feeling.

(To be concluded.)

[4] Med. Chir. Trans., vol. lxii.

Clinical Lectures
ON
SOME CASES OF HEART DISEASE.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton,

BY R. DOUGLAS POWELL, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL, SENIOR ASSISTANT-PHYSICIAN TO THE MIDDLESEX HOSPITAL.

LECTURE II.

GENTLEMEN,—At the end of my former lecture I was referring to the prognosis in cases of mitral regurgitant disease, and we examined two cases in which a simple systolic bruit but partially replaced the first sound, in which, although of some duration, there was yet no considerable ventricular hypertrophy or dilatation present, and which might be regarded therefore as of favourable prognosis. Not a few people live an active life unconscious of the presence of such a mitral leaking, and we must be cautious not to allow the length of our ears to exceed that of our judgment in discovering such a lesion, without taking into due account its attendant phenomena, and in thus too hastily condemning a case of heart disease without well ascertaining and taking into consideration what may be the possibilities of the case on the side of compensation. The question now comes—Is the mitral valve rendered incompetent by rheumatic endocarditis ever restored to

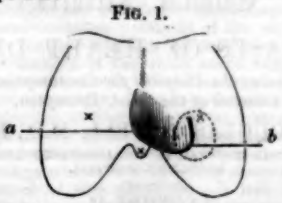
competency? Certainly in a few cases. A soft variable bruit may make us hopeful, but I do not think we shall ever be wise in giving an opinion upon this point until some little time has elapsed after the attack of rheumatism. I have seen one instance in which a very distinct mitral bruit, existing some time after rheumatic fever, has completely and permanently disappeared. The disappearance of such a bruit may be due to a smoothing down or, possibly, the absorption of small vegetations, or to restoration of the tone of relaxed and temporarily dilated ventricle and papillary muscles, or to a slight narrowing of the mitral orifice within the capacity of the valves. The latter, if it exist, is but a dangerous and only temporarily remedial process, however, which is apt to continue to constrict the orifice, and to shorten and thicken the valve, producing a reappearance of the murmur in association with constrictive disease. With a more thorough incompetence of the mitral valve, we have perhaps the gravest of heart diseases, with the later phenomena of which I will not detain you, as cases are not now before us.

Our special object to-day, however, is to speak of some cases of mitral constrictive disease, some living examples and morbid specimens of which I have brought here for your examination.

Of this disease—mitral narrowing—there are at least two kinds, differing in pathology, in duration, and, as I believe, in origin—viz., the funnel form and the diaphragm form of mitral narrowing. I will ask you to examine some cases illustrating the former of these two varieties.

CASE 1.—Mrs. H——, aged twenty-two, an in-patient under Dr. Powell's care from March 5th until May 31st, 1878. Has married since leaving hospital. Fairly well developed woman, with narrow chest. No hereditary predisposition to phthisis or heart disease. Six years ago first began to suffer from breathlessness on exertion, but had no definite illness until five years ago, when she had pleuro-pneumonia with pericarditis. Never had rheumatic fever. On admission patient complained of troublesome cough, with expectoration occasionally streaked with blood. Some bronchitic râles were audible over the bases, and from time to time some crepitant spots could be detected at different parts of the chest. The respirations were always rapid, about 40 in the minute; the pulse from 80 to 100, quite regular. On one occasion, April 24th, 1878, the patient was suddenly seized with a peculiar sense of excitement and anxiety, with confusion of mind, "felt as if going to have a fit," and experienced painful cramps in muscles of fore-arms, arms, and legs. No squinting or alteration of pupils. The symptoms subsided in half an hour. Patient has had one or two chest attacks during the past winter, but has otherwise kept well.

FIG. 1.



The shaded area shows cardiac dulness. *a*, Impulse of right ventricle increased. *b*, Apex in normal situation. The dotted line marks area of murmur and thrill.

Physical signs.—Heart's apex-beat in normal situation. Impulse decidedly strong between the fourth and sixth cartilage left margin of the sternum (see Fig. 1), and at the apex a thrill is felt preceding the beat of the heart. At the second space near the sternum a distinct shock or tap is felt by the finger applied, corresponding with the closure of the pulmonary valves. The first sound of the heart is distinct and ringing, the second sound clear and accentuated over the pulmonary cartilage. A rough rasping bruit extends with increasing intensity from near the second to the first sound, with which it abruptly terminates (see Fig. 2). This bruit is limited to the apex, and is not audible at the angle of the scapula, where the first and second sounds are distinct.

CASE 2.—Emily A——, aged twelve, an undersized but intelligent child, with small contracted chest, admitted under Dr. Powell, March 20th, 1879; discharged June 16th. Mother healthy; father was an out-patient at this hospital. Had had no previous illness except measles and whooping-cough until February, 1878, when she became troubled with shortness of breath and cough, and has been more or less under treatment since.

The *physical signs* in this patient closely resembled those of the preceding case, and the same diagrams would equally well indicate the murmur and thrill in both. The second sound over the pulmonary cartilage was markedly accentuated, although not perceptible to the finger. The impulse of the right ventricle was more decidedly hypertrophic, and the apex-beat was in the nipple line, the thrill and murmur being both most distinct immediately to left of nipple line. On admission there was dulness with weakness of breath-sound, and some crepitation at the right posterior base. These pulmonary signs have cleared up, and the patient is active and sprightly in movements, and, beyond shortness of breath and slight occasional cough, presents no features characteristic of heart disease. The pulse is regular, 88.

CASE 3.—The heart I now pass round for your inspection was removed from a woman, aged fifty-eight, who died in the Middlesex Hospital with pleurisy and effusion. Hæmorrhagic infarcts were found in the right lung, and some thrombosis in the left auricle of the heart. The heart weighed eleven ounces. The right ventricle was somewhat enlarged. The mitral valve, competent to water-test, presents a very good example of the form of disease or deformity which I believe exists in the other two cases. Its margins are adherent, so that it projects into the ventricle in the form of a funnel, having a narrow opening at its truncated apex. There are no vegetations on the valve. A loud presystolic murmur was heard during life. The patient had never had rheumatism; she was married, and had had thirteen children. She had for the last nine years complained of palpitation and shortness of breath, and had finally died of a chest disease, which may or may not have originated in her heart affection.

Perhaps I shall most concisely, and with least repetition, point out to you the peculiarities of this form of heart disease, of which these cases are examples, by referring you to the following summary in which I have enumerated the chief phenomena to be noted. I will presently contrast the signs and history here detailed with those of another form, or, perhaps, other forms of mitral stenosis, to which, for convenience of reference, I have given the name of diaphragm mitral.

CHARACTERISTICS OF FUNNEL VARIETY OF MITRAL STENOSIS.

MORBID ANATOMY OF HEART.

Valve.—Projects downwards into the ventricle, as does the normal valve, but with the margins of leaflets adherent, so as to give a funnel shape. The apex of the funnel presenting an oval opening, that will only admit the top of the little or forefinger. Valve admits of no regurgitation, and presents no vegetations. It is not thickened, save in some cases, in such degree as may be accounted for by long-continued mechanical strain.

Left ventricle.—Of normal size, or rather small.

Left auricle.—Notably thickened and enlarged.

Right ventricle.—Markedly hypertrophied, and more or less dilated and hardened. Usually projects below the left ventricle to form the apex of the heart.

Other phenomena.—Lungs heavy, congested, and toughened. Tendency to pulmonary apoplexy, and to infarcts in other organs—kidneys, spleen, brain, &c.

CLINICAL PHENOMENA.

Cardiac impulse.—Apex-beat in or about normal situation. Impulse not increased there. But impulse of the right ventricle is strongly felt near the left margin of the sternum at the ensiform level. (See Fig. 1.) Action of heart regular.

FIG. 2.

In this figure the two sounds of the heart are indicated by the firm lines 1, 2, vertical to the base line. The shading represents the murmur commencing soon after the second sound, and gathering force up to the first, with which it abruptly terminates. The dots mark the time and relations of thrill.

Thrill.—At the apex very distinct; usually prolonged,

occupying the latter part of the "pause," and abruptly terminating at the systole. (See Fig. 2.)

Bruit.—Prolonged rasping, commencing soon after the second sound, and continuing with increasing intensity up to the first sound, with which it abruptly terminates. (See Fig. 2.)

First sound.—Unattended with murmur. Notably clear, and of accentuated valvular quality.

Second sound.—Clear and accentuated, especially over the pulmonary cartilage, where it may often be *felt* to give a shock to the finger, lightly applied. Often reduplicated.

Pulse.—Regular in force and rhythm, and whilst patient is quiet but little accelerated. On effort or extra excitement is apt to become irregular.

Patients.—Often undersized, with small, contracted, more or less "pigeon" typed chests. Subject to repeated catarrh, and presenting œdema sounds over the pulmonary bases. Such patients often say they have been "asthmatical" all their lives.

Onset of symptoms.—Insidious, with increasing breathlessness and frequency of catarrhal attacks. During one of such attacks the murmur is discovered. In other cases symptoms remain entirely dormant, until they are developed by some unusual fatigue or violent effort.

Origin of disease.—Never rheumatic. Probably a congenital defect.

Prognosis.—Often exists a long time undiscovered, and with care and quietude may but little shorten life. Under the fatigue and excitement of an unguarded life, however, the pressure upon the valves leads to thickening, and sometimes shortening, from interstitial growth, or the right ventricle may be readily overstrained. A tendency to embolism of organs, especially of the brain.

I find that the term "funnel-shaped" was first applied to this form of mitral disease by Dr. Conway Evans in 1866,[1] when he brought a case before the Pathological Society of London, which he regarded as of congenital origin, and which he brought forward to show the effect of strain in producing atheromatous changes in the pulmonary artery and its branches. Dr. Kelly, in 1870,[2] more formally attributed this condition of valve to congenital defect. And in 1871[3] I endeavoured to separate clinically the two forms of mitral disease from one another. Dr. Hilton Fagge's[4] experience is not quite in accordance with mine, either as to the non-rheumatic origin of the funnel form of the disease, nor as to the distinctness with which that variety may be separated clinically from the ordinary button-hole, or, as I prefer to term it, diaphragm variety of constriction.[5] Both Drs. Fagge and Moxon agree, however, in the comparative rarity with which a history of rheumatism is obtained in cases of mitral constriction. I am convinced that the more carefully the purely funnel cases are separated out the more clear it is that the preponderance of non-rheumatic cases is accounted for by them.

I have here tabulated from my case-books nineteen cases of mitral stenosis—thirteen females and six males. Of the thirteen females, in eight cases the physical signs and other characters were those of the funnel variety of the disease, as referred to in the above summary. In six of these cases there was absolutely no rheumatic history. In two cases there were statements of "inflammation of heart ten years ago," and "pains in knees five years ago." Of the five remaining cases, in which the description of disease corresponds with the second variety, in all there was a clear history of rheumatic fever, and in two instances of two separate attacks. Of the six male cases in only one did the disease correspond with the funnel type.[6] In this one there was no rheumatic history; of the other five cases all had had rheumatic fever, two of them having had a second attack. The large proportion of cases of the funnel variety of the disease occurring in the female sex is very noteworthy, and the more so in these tables because the female table was drawn up from cases met with between the year 1876 and the present date (1879), whilst the males were taken from case books, 1872 to 1879. I have only now freshly considered this matter since 1871, and to my mind it seems that the condition of valve and of the heart found post mortem, the sex of the majority of the patients, the physical condition of the patients, and the entire absence of history of rheumatism or of any other cause of endocarditis in the immense majority of them, conclusively point to the funnel form of mitral stenosis being of congenital origin. We need to know, however, more respecting the development of this valve in the fœtus.

In funnel mitral disease the diagnosis is, as a rule, very easy; the accentuated second sound remains distinct, as, passing the stethoscope down the sternum to the fourth cartilage, and working towards the apex, we bear the clear and valvular first sound also, and the murmur, rough and thrilling, running up to it from near the second sound. This murmur is perceived over a restricted area, of which the vertical line from a little above the nipple to the apex-beat is the diameter. (Fig. 1, *b*.) As we pass round to the scapular region both the sounds of the heart may be often heard (as in Case 1), but unaccompanied by any murmur. On placing your finger over the second space near the sternum in Case 1 you will distinctly perceive the shock of the closure of the pulmonary valves. The thrill at the apex and the increased impulse at the fifth cartilage left margin of sternum are in both cases plainly discernible. The problem, as regards the circulation, in these cases rests with the right ventricle and the left auricle, and not with the left ventricle, as in the cases of mitral regurgitation. The difficulty is on a different side of the valve. It is a simple narrowing of the systemic portal of the pulmonary circulation to be overcome by increased power of right ventricle and left auricle. The escape of blood into the left ventricle takes place during the pause, and so long as that pause is sufficiently long—i.e., so long as the heart's action is quiet—the left ventricle is sufficiently filled, and the circulation goes on fairly well. The valve, as a valve, is perfect, and it is a fair assumption, and certainly one in accordance with the finding of experience in these cases, that hypertrophy commencing in early life is more enduring than that called forth at a later period. Persons with this lesion, however, must be content to lead a quiet, physically inactive life, temperate in habits and diet. Their normal state is one of a certain degree of pulmonary fulness or congestion. They are, therefore, prone to catarrhs and to attacks of active congestion, and should be guarded from the causes of such attacks. Under favourable circumstances such patients may go on indefinitely in the enjoyment of fair health, may marry and have families without being conscious of their cardiac disablement (Case 3), and the sex of the majority of these patients is much in their favour. With hard work and exposure, however, they get overstrain of the right ventricle or of the pulmonary circulation, and a rapid breakdown is the consequence. The onset of symptoms in these cases is often sudden after some unusual fatigue or severe effort. A short tricuspid bruit may be added to the other signs—it was so in three of the eight cases,—or the ventricle and auricle may work on with astonishing vigour against adverse circumstances; but the increased strain gradually tells upon the valve—it becomes thickened, stiffened, and begins to leak; a systolic apex bruit is added to the presystolic, and the safeguard of the patient is invaded. In either of these cases irregularity of the heart's action is increased, pulmonary congestion, pulmonary apoplexy, and commencing dropsy supervene, and the case enters upon the phase for active medication, the beginning of the end.

Do not forget the disposition to embolism in these patients. Anomalous brain symptoms, fugitive albuminuria with hæmorrhage, painful engorgement of the spleen, and sudden blocking of other systemic vessels, may thus arise. Two cases within my own experience have terminated with embolism of the brain, and I have seen a well-marked case in which splenic enlargement and hæmaturia with local peritonitis were accounted for by the presence of this form of cardiac disease. The retarded circulation in the left auricle is favourable to the formation of thromboses there, or of but slightly adherent coagula, which in due time may pass into the left ventricle and be distributed in the general circulation. We do not find vegetations on the valve itself, but sometimes its upper (auricular) surface may be roughened by small scaly laminæ.

[1] Path. Trans., vol. xvii.

[2] Path. Trans., vol. xxi.

[3] THE LANCET, June 10th, 1871. Med. Times and Gazette (1871), vol. i., p. 305.

[4] Diseases of the Valves of the Heart, Reynolds's System of Medicine, vol. iv., p. 609.

[5] Dr. Burns (Diseases of the Heart, 1809, p. 174) describes the latter stages and post-mortem observations of a case which may have been one of funnel mitral, with extreme narrowing.

[6] I have been obliged to omit one case from this list from unfortunately having omitted to record as to rheumatic fever, and one case from female list, in which, although absence of rheumatic history is distinct, yet physical signs are not quite clearly put.

CONTRIBUTIONS TO AURAL SURGERY.

BY W. B. DALBY, F.R.C.S., M.B. (CANTAB.),
AURAL SURGEON TO ST. GEORGE'S HOSPITAL.

No. VIII.—THE PROGRESS AND TERMINATION OF INFLAMMATION WITHIN THE TYMPANUM.

IN the early stage of inflammation within the tympanic cavity, none but a very rash or ignorant man would venture to do more than suggest probabilities in regard to the future—either as to life or death, good or faulty hearing, perforate or an entire membrane. Again, should the membrane give way from ulceration, a similar uncertainty may be said to exist as to its ultimate closure, unless it has been entirely destroyed during such a process. To the patient, however, it is of immense importance which out of this list of possibilities may eventuate, and it is satisfactory to be able, by a careful consideration of the parts under observation, to direct his attention to the details which should be attended to in the management of his case. For example, when, in an adult, a few days of pain in the ear is succeeded by a purulent discharge and relief from the pain, what is more common than to find him syringing the ear with some astringent lotion, erhaps composed of a solution of sulphate of zinc or acetate of lead, with the idea of checking the discharge, which annoys him? The effect of this treatment is threefold. The edge of the perforation cicatrises, the discharge visibly decreases, and the patient is more deaf than before he commenced this treatment. Thus the chance of a closure of the perforation is enormously decreased, and so perhaps for the rest of his life he is in more or less danger of cerebral complications. Now whilst no pathological state of the ear is more frequent than a perforation, a scarcely less common one is an entire membrane that has at some previous time been the seat of a perforation, and this is due to the fact that a discharge from the ear in children is often allowed to remain without any treatment, and so they escape being subjected to the syringing by astringents just mentioned. Children, as we know, are peculiarly liable to inflammation of the middle ear from catarrhal causes; the membrane most readily gives way, and, when no very great extent of tissue is lost, it as readily heals. The condition most favourable to healing is scrupulous cleanliness, and this, to be effectual, cannot be achieved solely by syringing, but should include the expulsion of purulent matter from the tympanum. In other words, whenever the patients are old enough to be taught, they should blow through the perforation whilst the ear is being syringed; or, if too young to do this, the same result must be brought about by using Politzer's method. In doing either, the cavity of the tympanum is freed from the pus which collects in it, and it is this collecting of purulent matter which helps to retard the healing. If it be thought that such a mode of cleansing the tympanum is likely to interfere with the healing process, it may be remembered that when an opening has been artificially made, a similar proceeding, however assiduously employed, will not prevent closure for more than a few days at the most. But what is more useful than theorising by analogy is the fact that experience shows this cleansing process to be constantly followed by healing when it is commenced sufficiently soon—i.e., before cicatrisation of the edge of the perforation has taken place. In the early days, then, of a small perforation, the prospect of healing is very good, and anything even of the most simple nature which will facilitate this is well deserving of attention. In a previous contribution I have shown how general is the closure of a perforation accidentally produced, even after the purulent discharge has been established, and such a case differs but little from a perforation effected by disease if the loss of tissue has been small. But how fares it when the loss has been extensive? To this it must be answered that where there is a very large opening it remains for a considerable period, and at times during life; certainly for life if all the membrane save a narrow rim has been lost; but healing can never be declared impossible if so much as half the membrane is left; indeed, even two-thirds have been known to be restored. This restoration, after long periods of discharge, cannot be definitely started in such instances, and it is delayed perhaps for years; but that it does take place, and apparently from no assignable cause, as a matter of common observation when patients present themselves, after an absence of several years, with an entire membrane, but one that had previously been noted in the case-book as having been perforate.

When the function of the membrana tympani as a protective membrane is suspended by the admission of air through a perforation, and the lining membrane of the tympanic cavity is thus converted into a suppurating surface—in other words, when a fistulous opening has been fairly established, the minimising of the discharge is found to be accomplished by the application of some suitable material to the tympanum, which protects it from the external air. The unsuitable nature of gutta-percha is one of the several reasons which has led to the disuse of Toynbee's so-called artificial membrane, and the theory of the manner in which this occasionally increased the hearing power need not be discussed here. Suffice it to say that, if pressure on the stapes is required, it may be effected in a variety of ways, and in such a manner that, whilst air is excluded from the tympanum, the exposed mucous membrane is tolerant of the application. Until both these requirements are satisfied, no permanent diminution or cessation of the discharge may be expected; but when they are, there can be no sort of doubt but that the chances of cerebral inflammation are enormously lessened and wellnigh destroyed. Under such favourable conditions, the membrane, in the course of months or years, is often found to be considerably increased in area; the exuberant granulations disappear, and are replaced by a fairly healthy surface. The complaisance with which a discharge from the ear is regarded for the best part of a lifetime would be surprising if the same carelessness were not exhibited in other matters connected with the health, and the idea with the public seems to be generally prevalent that it is comparatively harmless, until perhaps an insurance office, more cautious than usual, refuses to insure the life of the individual so suffering. Another very general impression (and one not altogether confined to the public) is that a large perforation is more serious than a small one, the reverse of this being more in accordance with facts, as a large opening of this kind is far more easily managed than one of less size, not only as regards the hearing, but also as to the facility with which the tympanum may be protected.

If in the course of inflammation of the middle ear the portio dura in its passage through the tympanum becomes affected, it by no means follows that inflammation should have been so severe as to cause rupture of the membrane, or, indeed, very severe at all. No doubt facial palsy constantly occurs when the inflammation has been acute, and so acute as to cause in addition to the perforation caries of the bone, but the same accident to the nerve may happen after a very slight attack of earache followed by very trivial deafness, which is soon recovered from. The advent, then, of facial paralysis in ear affections need not necessarily be regarded as pointing to serious change within the tympanum, but rather to the fact that the bony covering of the aqueduct of Fallopius is abnormally thin, and probably so perforate as to leave the nerve in an unusually exposed position. But whether the nerve soon or ever recovers its function will certainly depend upon the severity of the inflammation which has caused its paralysis. Thus I have often observed the paralysis following slight earache to be completely recovered from in the course of a few months, but in a case where the facial palsy followed the enterprising treatment of injecting a strong astringent through the Eustachian catheter, the action of the muscles was not regained for a very long period, and then only after prolonged treatment by the continuous current. Any change for the better is of course not to be expected when caries of the bony canal just mentioned has taken place, and in illustration of the tediousness of recovery may be cited two cases previously mentioned in these papers, the one where the nerve was injured by the point of a pair of scissors accidentally plunged through the membrane, and the other in which the paralysis followed the removal of an exostosis from the auditory canal by electrolysis.

From these remarks it will be obvious that whenever acute catarrh of the ear ends in a perforation of the membrane the sooner this structure gives way the better, for by this event the more or less complete disorganisation of the contents of the tympanum is avoided. Whilst it is clearly most desirable that, when it is possible, the inflammatory process should be controlled, as it often may be by leeching in front of and behind the ear, its progress is often so rapid as to preclude this possibility; and in scarlet fever and other exanthemata

the serious condition of the patient very generally prevents the ear trouble attracting the attention which it otherwise would. How the hearing may suffer if the membrane in such cases remains imperforate for many days can be estimated by noting that it is sometimes quite lost in the ear so affected, and damaged but slightly in the other from which the discharge appeared much earlier in the attack. Again, it is not unusual to find a patient after simultaneous inflammation of both tympana totally deaf in the ear with an entire membrane, and hearing fairly well with the ear whose membrane is perforate.

If the results of inflammation within the tympanum are important as regards the loss of hearing or facial palsy, how much more so is the further disorganisation and complications which may follow the prolonged suppuration induced by a fistulous opening into this cavity, such as bony enlargements in the external canal and morbid growths arising from the mucous membrane lining the tympanum. Both of these are often without doubt excited by the constant irritating presence of purulent matter, and either may at any time interfere with the escape of pus from the ear.

In the last volume of the Transactions of the Medical and Chirurgical Society I related a case of malignant growth which commenced in the tympanum, and since that was published a similar case has come under my notice, in which death occurred from sudden hæmorrhage from the internal carotid. In this latter, as in similar instances recorded, a discharge from the tympanum had persisted for many years, and that which had all the appearance of a small polypoid growth, assumed, after a long period of quiescence, a malignant character. The same sort of history preceded another case, in which the growth was a round-celled sarcoma. Generally speaking, however, the importance of growths in the tympanum lies not so much in their structure (which is usually of a most simple character), but in the fact that they may, and do, become the indirect cause of death, by preventing the free exit of pus from the tympanum. If any point more than another demands careful attention in their treatment, it is not only their early removal or their complete eradication, but the defence of the tympanic cavity by some arrangement already referred to.

THE ALKALINE, SALICIN, AND SALICYLATE OF SODA TREATMENT OF ACUTE RHEUMATISM.

By ROBERT SINCLAIR, M.D.,

PHYSICIAN TO THE DUNDEE ROYAL INFIRMARY, AND PHYSICIAN TO THE AURAL DEPARTMENT.

(Concluded from page 246).

AN admirable *résumé* of the physiological and therapeutical actions of salicylic acid was lately read before the Harveian Society of London by Dr. Squire, and published in THE LANCET of Dec. 20th, 1879. Dr. Squire vigorously defends the drug as the best remedy hitherto proposed for acute rheumatism, and quotes several authorities in its favour. Fully acknowledging the excellence of the results in his limited series of eight cases, I cannot but think that a more extended experience will give him less cause for satisfaction, while more careful research will probably qualify the remarkable statement that "none of the methods, before the use of salicylic acid, would markedly lower the fever, and shorten its duration, or lessen the liability to heart disease, or diminish the anæmia of convalescence, with its tendency to relapse." The results of Dr. Oliver Moore, quoted by Dr. Squire from the *New York Medical Journal* for August last, are so brilliant and startling that British physicians may well look to their laurels. Having, unfortunately, at this moment no means of access to Dr. Moore's paper, I must quote from Dr. Squire:—"305 cases treated by salicylates relieved in an average of 2·9 days, discharged cured in 9·5 days average." This achievement is clearly without its rival, during historic times at all events. Dr. Cavafy's results, which are also praised by Dr. Squire, need not detain us, as I have already dealt with them. But I must enter an emphatic protest against the method adopted by Dr. Squire in manipulating the figures placed on record by Dr. Jacob, of Leeds. It is surely one of the simplest axioms of practical medicine that, if knowledge is to be advanced, it must be by the impartial record of unsuccessful as well as of successful results. Dr. Squire tells us that "63 per cent. of Dr. Jacob's cases were relieved in an average of less than three days, and discharged cured in twelve days. Only 3·5 had heart affection." These figures are correct enough as far as they go; but they do not tell us the whole truth. I now quote from Dr. Jacob:—"In the second class were 30 cases, with an average duration of eleven days, and stay in hospital of thirty-five days. Two cases appeared not to be influenced by the drug, besides five cases which proved fatal. Forty-five cases were admitted without cardiac complication; of these, three contracted pericarditis while under treatment, making a percentage of cardiac disease under treatment of 6·6. Relapses were very frequent, five patients being readmitted with second attacks, and two a third time."[1] Let us carefully look these facts in the face. If we add the two classes of cases together, we find the average duration of the rheumatic symptoms to be as nearly as possible seven days, and the average residence something like twenty-three and a half days. The percentage of cardiac complications, though not excessive, is not unprecedented. The two cases of failure, the frequency of relapses, and the five fatal cases, speak for themselves with an eloquence which I shall not attempt to emulate.

Accuracy is desirable in all things, and in none more than in dealing with statistics which involve important issues. Dr. Squire credits Dr. Jacob with having "brought the results of more than 300 cases so treated" (by salicylic acid) before the Manchester meeting of the British Medical Association in 1877. As a matter of fact, Dr. Jacob gave the results of *100 cases of rheumatism treated by salicin and salicylic acid*.

One word more. A teacher at whose feet the whole profession is willing to listen and to learn, has recently uttered a note of warning in reference to the free external use of cold water in pyrexia, which should be carefully pondered by Dr. Squire and all other advocates of powerful remedies. "By its use (cold water) Musa saved the life of Augustus. But it is not to be ignorantly or rashly used; for while it cured the emperor, it killed his nephew."[2]

The experience of the physicians of the Dundee Royal Infirmary in the use of salicylate of soda has been considerable, and the record of it will form a contribution of some value to the question. I have, therefore, gone carefully over the case-books for the last three years and a half, and have tabulated the results. The table is too long for insertion in a paper already very lengthy, so I shall content myself with mentioning the principal points of interest. In the first place, I must state that the great majority of the cases were treated by Drs. Maclagan and James Duncan, my term of office having begun only in the middle of February, 1879. In seventy-seven cases the average duration of the rheumatic symptoms—viz., pain, swelling, and elevated temperature—was 8·9 days, and the average residence in hospital was 21·48 days. Pneumonia occurred once, pericarditis once, and endocarditis twice, after the patients were fairly under the influence of the drug. In this group I have not included a number of extremely obstinate and relapsing cases in which the drug was abandoned, after fair trial, in favour of other remedies, such as alkalies, salicin, and blisters. Nor have I taken into account the case of a previously healthy boy, who, during a first attack of relapsing rheumatism, was treated with salicylate of soda and salicin, and became affected with pericarditis, endocarditis, and pleurisy, which prolonged his residence in hospital beyond three months, and culminated fatally two months after he was discharged at his own request.

The practical outcome of our experience does not differ widely from that of Dr. Cavafy, if the larger number of our cases be considered. The average duration of rheumatic symptoms and of hospital residence has been rather less with us. But, on the other hand, we have had graver cardiac complications. As regards the proportion in which poisonous symptoms were developed, I am unable to speak, because they have not been inquired for in every case, or always noted when they occurred. But I do know that they are by no means rare, as the St. George's Hospital Reports and the periodicals of the last three

[1] Brit. Med. Jour., Aug. 25th, 1877.

[2] Pharmacology and Therapeutics, by T. Lauder Brunton, M.D., &c., p. 191.

years amply testify. The slighter symptoms — deafness, giddiness, and nausea — are doubtless of little moment. But we cannot afford to despise cardiac depression, delirium, and unconsciousness.

Like many others, I cherished expectations that salicylate of soda would accomplish marvels in this, one of the commonest and most agonising of human maladies. The stern teaching of experience has banished the hope and cleared the mental vision. Who can tell how long the present method of treatment will reign supreme, or what is to be the next effort of sanguine empiricism?

Conclusion.—The immense variety of measures that have at different times been advocated in the treatment of acute rheumatism is almost appalling. Bleeding, blistering, sweating, purging, calomel, opium, cinchona, colchicum, antimony, aconite, guaiacum, nitre, and actæa racemosa, have had every virtue claimed for them that the most ardent practitioner of the healing art could desire, and they have all had their day. In too many instances "specifics" have been lauded to the skies on wholly insufficient grounds, and after the most limited experience. The doctor and the drug have far too often been credited with results that belonged by right to the good constitution of the patient and the benign influence of nature. On the other hand, remedies that have produced unquestionably good results in the practice of competent physicians have been pronounced inert or baneful by their contemporaries or successors. To arrive at the truth, with such conflicting statements before us, is no easy matter. It is probable, as has already been hinted, that there are cases which yield to every kind of treatment, or to no treatment, and some which pursue their destructive career in spite of all the artillery in the Pharmacopœia and out of it.

Of the drugs in vogue at the present time, alkalies, salicin, and the salts of salicylic acid, appear to be those most deserving of careful and extensive trial. But, in order to obtain all the good of which these remedies are capable, full and frequently-repeated doses must be administered, and to adjudicate fairly their several places it will be necessary to have before us the carefully-recorded experiences of many physicians in large numbers of consecutive cases. Concerning the alkaline method we do possess some very valuable statistics, which show results that, in the matter of cardiac inflammations, at least, have not yet been rivalled by any other system. Whether our new remedies are capable of rivalling or surpassing the alkaline method is a question that is not yet ripe for settlement, though it has been often answered of late, with a strange disregard for the laws of evidence. I know very well that it is just now the fashion to congratulate ourselves on what we call our progress, and to compare with complacency our present powers of dealing with rheumatic fever with those we possessed only a few years ago. The grounds for this satisfaction are, unhappily, not nearly so strong as the satisfaction itself. The men who speak so enthusiastically about their results are abundant enough and honest enough; but I find that they very commonly make two important errors—the comparison of a few recent successes with a few old, but well remembered, failures, and the disregard of the analysis of their results, as well as of the statistics of other methods. I do not mean to say that we have made no advance. The future must decide this. But I do say unhesitatingly that, so far as published results enable us to judge, the advance is less real than is usually supposed. If, however, our therapeutic progress has been thus unsatisfactory, we have made one important step forward, the end of which it is impossible to see. Dr. Southey's laborious investigations have opened the way to a true knowledge of the natural history of the disease. I, and many others, I hope, intend to begin immediately a record of my cases on the lines he has so clearly and ably laid down. By and by, we shall, perhaps, have something to say that is worthy of British medicine.

And now we must make the confession that neither ancient nor modern therapeutics have given us the power of mastering this terrible and painful malady. Medical literature teems with instances of remedies proposed as infallible cures for rheumatic fever, and shortly afterwards condemned to the limbo of forgotten nostrums. Both lines of action, the constructive and the destructive, have not unfrequently been too hasty. The moral is obvious. Let us neither approve nor condemn the remedies at present in use after a few isolated successes or a few isolated failures. Let us try them wisely and fairly in large numbers of cases, over long periods of time; and, above all, let us try to find out all that can be known about the disease, while we honestly record our results. A course of historical and statistical investigation is the best corrector of sanguine hopes from therapeutics, though neither facts nor figures should be allowed to damp our ardour too much. It becomes us, in the meantime, to employ judiciously whatever line of treatment our own study and our own experience may indicate as the best. But the physician who places a blind reliance on any one drug or on any one combination of drugs is like a general who subordinates his tactics in the field to the crude experiences of Aldershot and Hyde-park. In either case the result will be the same. A career of smooth, unbroken success may for a time lull the routinist into a dream of fancied security. But, sooner or later, emergencies will arise, for which no amount of "peaceful training" can prepare, and before which the cherished *system* must utterly and hopelessly break down.

ON THE TREATMENT OF DIPHTHERITIC OPHTHALMIA BY LOCAL APPLICATIONS OF SOLUTION OF QUININE.

BY JOHN TWEEDY, F.R.C.S. ENG.,
ASSISTANT-SURGEON AT THE ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

(Continued from p. 196.)

I AM, of course, prepared to admit that a successful issue will not, of itself, justify the adoption of a purely experimental mode of treatment in so serious a malady as diphtheritic ophthalmia. A reasonably intelligible explanation should be forthcoming. This, I venture to think, I am able to produce.

I will first state why I rejected the plan of treatment recommended in the text-books, and then give the reasons which led me to try local applications of quinine.

My dislike of the usual treatment was, I must confess, in the beginning, little more than prejudice. I shrank from lavish mercurial inunctions, copious vascular depletions by means of large and frequent relays of leeches,[1] repeated doses of tartar emetic, and starvation diet, as false and barbarous, and only to be tolerated on the most unequivocal evidence of uniform and unvaried success. This evidence is, however, if I may so speak, conspicuous by its absence. The percentage of failures given in the published statistics, including total destruction of the eyeballs and dense adherent leucomata, is very large. The exact proportion I have not been able to ascertain. In general terms, it may be said to exceed fifty in the hundred. Under these circumstances I was entitled to some freedom in instituting a therapeutical experiment.

The reasons which induced me to employ quinine were, primarily, referable to the pathological and histological investigations of Cohnheim, Recklinghausen, and Stricker, on the processes of inflammation in the cornea, and to the researches of Binz, Scharrenbroich, and Martin, on the antiphlogistic properties of quinine. According to the three first-named observers the principal changes that occur in traumatic inflammation of the cornea consist of the germination of the protoplasm of the stellate corpuscles and of the immigration of leucocytes from the adjacent capillary vessels,[2] and the last three have conclusively proved that quinine, whether given internally or injected subcutaneously, exerts a specific influence on the processes of inflammation by hindering or retarding the germination of protoplasm, and checking the vital amœboid movements and consequent migration of leucocytes.[3] Dr. Binz says the escape of leucocytes, and the formation of pus that ensues, may be distinctly limited in animals by quinine, independently of the condition of arterial pressure. This property is due, he says, to a lowering of the affinity of the corpuscles for the

[1] Graefe in some cases used as many as 100 leeches, applied to the root of the nose, in the course of seven days. From twenty to thirty is the usual number.

[2] For a succinct account of the changes see the article by Dr. Burdon-Sanderson on "The Process of Inflammation," in Holmes' System of Surgery, 2nd ed., vol. v., pp. 706-772.

[3] See the Practitioner, August, 1868, and vol. iii., pp. 107-109.

oxygen of the hæmoglobin, this oxygen being the stimulus which excites the independent movements by which emigration from the veins and capillaries is partly effected.[4] The experiments of Dr. Binz confirm, moreover, the statement of many independent observers that quinine possesses in a high degree the power of arresting putrefaction and fermentation.

Now all these alleged properties of quinine are desiderata in a remedy for diphtheritic ophthalmia. As far as possible, the germination of the corneal protoplasm and the immigration of leucocytes must be arrested, and the facile putrefaction of the pseudo-membranes prevented. And if it be true, as Buhl, Hueter, Oertel, Eberth,[5] and others affirm, that the diphtheritic inflammation is caused by minute microscopical organisms, these too must be either destroyed or rendered innocuous. On *à priori* grounds, therefore, quinine was specially indicated, and indeed it was the only known drug that seemed likely to fulfil all the theoretical conditions; and the practical test was not disappointing. Not only was the fatal progress of the case I have described speedily arrested by means of local applications of quinine alone, but a perfect recovery ensued even after the hope of sight had been abandoned by competent authorities.[6] Nor was that case unique. At the same time, and for some weeks afterwards, other cases of diphtheritic ophthalmia were seen at Moorfields by some of my colleagues, who kindly sanctioned a trial of the quinine treatment. Two or three of these cases I had an opportunity of watching; the others occurred during my absence from town. Though in none of the cases that I saw was the pseudo-membrane so extensive, nor so thick as in my own case, there was no mistaking its true character. There was in every instance well-marked exudation into the palpebral mucous membrane, which no reasonable amount of force could remove. All recovered perfectly. In another case, which occurred during my absence, there was, I am told, great exudation and complete opacity of both corneæ. That child also recovered as regards the eyes, the corneæ becoming, according to the statement of Mr. Burnham, the house-surgeon, perfectly clear and transparent. Two weeks after dismissal the mother called at the hospital to say that the child had just died of diphtheria; but she volunteered the statement that the eyes were "nice and bright."

My excellent clinical assistant, Dr. Charnley, has supplied me with the following notes of another case treated by him, at Moorfields, during my absence:—A boy, aged five years, had had a bad eye for seven weeks, and had been attending another hospital. As the eye was getting worse the mother took the lad to Moorfields on August 30th. The child had not had a bad throat, nor had any of the children about. Both lids of the right eye were much swollen, and red; and there was a considerable yellow discharge. The middle third of the conjunctiva of the lower lid was occupied by a thick whitish-yellow membrane, which could not be wiped off with cotton-wool; an extension of this membrane ran on to the conjunctiva bulbi, and up to the lower edge of the cornea. The lower part of the cornea was opaque. The child was ordered a quinine lotion, four grains to the ounce, to be used frequently, and ice compresses. Ten drops of tincture of yellow chinchona were given in water three times a day. The child was pale and weak. The eye recovered without a check, and when last seen was normal with the exception of a slight nebula at the lower part of the cornea. I may add that I saw the boy in October, and could discover nothing but the faint nebula.

Assuming all these cases to have been identical with those described by von Graefe as diphtheritic ophthalmia, it still remains to be considered whether they were really manifestations of diphtheria. The answer that each one will give to this question will depend upon the opinion he entertains of the nature and origin of diphtheria. I may say at once that I am of those who regard diphtheria as primarily a local disease, developing afterwards into a general one from the local inoculation.[7] And if the general infection of diphtheria invariably follow a local inoculation, and if diphtheritic ophthalmia be one of the modes of local inoculation, we may hope that, in possessing a means of arresting this form of local disease, we possess likewise a prophylactic in the pharyngeal mode.

Little doubt as to the diphtheritic nature of these cases of ophthalmia will remain if it once be conceded that they are identical with those of Graefe. The observations and experiments of Graefe, Gibert, Hirschberg, Saemisch, De Wecker, and others have proved that to demonstration. I will merely add that most, if not all, the cases I have related came from the same district, and that diphtheria was prevailing there at the time. In one instance, at least, there had been (possible) communication between the mother of the child and a member of a family that had lost five of its number from diphtheria, and in another the child was reported to have died of diphtheria two weeks after the eyes had recovered from what had been diagnosed as diphtheritic ophthalmia.

In conclusion, I may state that there is scattered through the literature of diphtheria for the last 130 years a large amount of independent but concurrent testimony to the virtue of chinchona bark and its alkaloid, quinine, in diphtheria. As far as I can find, the first person who recommended the internal administration of bark in diphtheria, or putrid sore-throat as it was then called, was Dr. John Wall of Worcester, in an article which appeared in the *Gentleman's Magazine* for December, 1751.[8] The drug was then employed by Fothergill, Huxham, Johnstone, Saunders, Skeete, Kentish, Withering, Penrose, and many others, who have all left printed testimony of its great efficacy. In later times it was recommended by the learned Mason Good, by Dr. Perceval and Dr. Paul; and in our own times Dr. John Day[9] of Geelong, Australia, and Dr. Brakenridge[10] of Edinburgh, have spoken in the strongest terms of the value of quinine, both locally and internally.

CONSTIPATION VIEWED AS A DISEASE 'PER SE' AND AS AN EXCITING CAUSE OF DISEASE.

BY ROBERT BELL, M.D.,

PHYSICIAN TO THE GLASGOW INSTITUTION FOR DISEASES OF WOMEN AND CHILDREN.

(Concluded from p. 244.)

IN illustration of the foregoing remarks I append a series of cases, commencing with the youngest.

CASE I.—Mrs. J——'s baby, aged nine months, has been for some nights suffering acute pain, as evidenced by crying most bitterly, and kicking for hours at a time, and there was also a considerable amount of fever; but as the symptoms always subsided towards morning, some days were allowed to elapse before I was sent for. I ascertained that the following symptoms had been remarked by the mother and nurse, besides those enumerated above:—If by chance the child fell asleep, it invariably wakened with a start, and began to shriek as if in pain. There were frequent evacuations from the bowels, and latterly a good deal of mucus mixed with small pieces of feculent matter had been voided. Moreover, the child began to fall off in flesh, and it was when this manifested itself that I was sent for. I observed the child had a blanched and sallow physiognomy. The abdomen was very much distended, and it was ascertained that there had been pretty constant vomiting after taking food. One would naturally suppose that such a train of symptoms pointed clearly to some head mischief, and I cannot help thinking that in many cases of supposed hydrocephalus in children, the symptoms are due to no more than an accumulation of scybala in the colon, the presence of which acts as a direct irritant to the nervous system. The treatment consisted in giving an enema of salt and water—two teaspoonfuls of the former to a teacupful of the latter, the good effect of which was manifest in a few hours, and

---

[4] The Elements of Therapeutics, translated by Dr. E. L. Sparks, London, 1877.

[5] Von Ziemssen's Cyclopædia of the Practice of Medicine. Art. Diphtheria, by Dr. Oertel. American translation, vol. i., pp. 588, et seq.

[6] THE LANCET, Jan. 24th, p. 126.

[7] For a full discussion, see Dr. Oertel's article, op. cit., p. 577.

[8] "On the Cure of Putrid Sore Throat." Republished in the Medical Tracts, Oxford, 1780. No. III.

[9] "On Diphtheria," Australian Medical Journal, Sept. 1859.

[10] Practitioner, August, 1875. Copied into Braithwaite's Retrospect, 1875, vol. ii., p. 24.

the infant had a refreshing sleep after the enema had acted freely. This was the first satisfactory sleep the child had had for several days. No other remedies were called for. It may be remarked by some that a dose of castor oil would have had quite as good an effect, but it had been tried more than once without giving any prolonged relief, although it acted upon the bowels. I have often seen this happen, and I can only explain it in this way, that the scybala lie impacted in the sacculæ of the colon, and are not dislodged by the action of the oil, the matter removed by the oil simply passing over the accumulations of hardened fæces. In this case there was observed the anæmic look, falling off in flesh, flabby condition of the muscles, starting during sleep, fever at night, &c., all of which symptoms disappeared when the irritant was removed.

CASE 2.—F. M——, aged three, had prolapsus of the rectum, induced by a prolonged constipated condition of the lower bowel, but the prolapse was attributed by the mother to the boy's health having become deteriorated, whereas the ill-health was consequent upon the same cause as the prolapsus. The fact was elicited that the nurse had not been attending to the state of the child's bowels, and they had become so constipated that the little one shrank from going to stool because of the severe pain it produced. Coincident with this the boy's health began to fail. He was losing flesh, became feverish towards night, was restless, and started up during sleep, and throughout the day was listless and easily fatigued. At the same time his appetite was very fitful. It was the above symptoms which led to the conclusion that the prolapsus was due to the difficulty and consequent straining accompanying a motion of the bowels. An enema was ordered to be given every second day, and within a short time the child's health was completely re-established.

CASE 3.—My own boy, aged six, gradually began to lose flesh, and became very lethargic and easily fatigued. There was also a feverish condition at night, and sleep was always disturbed by starting, and sometimes a species of delirium would come on for a period varying from a few minutes to an hour or so during the night. He was drowsy and irritable, and cried on the least provocation. There was also loss of appetite and failing strength. The bowels acted every day, and seemed to be in very fair order. On examining the stools, however, they were found not to be sufficient in quantity, and were not soft enough in their consistence. He had an enema of salt and water, which brought away a large evacuation of hard fæces, and within a very few hours a decided improvement was observed in his health. He had all the appearance as if a heavy load had been lifted off him. He slept well the following night, and very soon regained his wonted health and spirits. This was all the treatment adopted. It may here be remarked that mothers and nurse-maids are very apt to be put off their guard when the condition of the child's bowels is being inquired into. The answer will frequently be given that the patient is quite regular in this respect. In fact, one is often informed that "the little invalid is very regular indeed," having often "more than one motion in the day." Now this is always a suspicious circumstance, and requires close attention. The stools should be examined, and we will almost invariably find that they are very small in quantity and of very hard consistence. Inquiry will further bring out the information that the child inclines to sit at stool and strain for a long time after having had a motion. This is because the rectum is not completely emptied, and the reason of the frequent small stools is due to the same cause. Another effect of this, more especially in boys, is an inability to retain the urine for any length of time, and thus in many instances we may account for the habit boys so frequently have of wetting the bed during sleep.

CASE 4.—J. P——, aged twelve, a girl, tall of her age, very thin and anæmic. She complains of being languid and easily tired, and inclines to lounge about all day. Naturally she is a sharp and intelligent girl, and is fond of her books, but for the past few weeks she does not care for her lessons, and altogether is quite changed in her demeanour. She inclines also to lie still in the morning, instead of rising at her usual hour, and always expresses herself as "feeling so weary." Her sleep at night is very much disturbed by dreams and nightmare. Her appetite is variable. The bowels are very costive, and she confesses that she has been in the habit of putting off going to stool when she has felt the desire to go. She also complains of pain at times over the right iliac region, which is tender on pressure.

The treatment consisted of an enema of salt and water every second night, which speedily removed all the symptoms, and a rapid restoration to health was the result.

CASE 5.—M. P——, aged sixteen, presents a chlorotic appearance. She is very weak, and is changed from being a lively and active girl, into one of languid, lethargic, and desponding appearance. She is irritable and hysterical. Her sleep is broken, and in the morning there is no refreshment from sleep, and in consequence there is a wish to lie still in bed, and a disinclination to perform any of the duties she used to enjoy attending to. She very speedily becomes breathless on moving about, and complains of an inability to walk even a short distance without it entailing great fatigue. The extremities, especially the feet, are hardly ever warm. The menses are regular, but the amount of discharge is much less than usual. The bowels are costive, and on inquiry the patient says that when she has a stool, there is a feeling that the relief is not complete.

The treatment consisted of an enema containing a tablespoonful of salt in one pint of tepid water, every second day. In a few days there was a marked improvement in all the symptoms. Blaud's pills were also prescribed, and in three weeks the girl was quite restored to her usual colour and active health.

CASE 6.—Miss R——, aged twenty, a healthy-looking country girl, came to town to be treated for dysmenorrhœa, which had caused her intense suffering for close upon three years, and which was growing month by month more severe. The patient was very hysterical, and her mother informed me that she was low-spirited, and irritable in her temper. She was gradually becoming less able for the least amount of fatigue; and however much sleep she might obtain it never was followed by a feeling of refreshment. Her digestion was very much impaired, and she complained of cold feet, and there was a tendency to shiver even when the temperature was high.

As the dysmenorrhœa was so severe, all the above symptoms were attributed to this, and I was inclined to endorse this view before I had made a vaginal examination, but on passing the finger into the vagina with the object of guiding the uterine sound, I found that the rectum was loaded with scybala. In consequence of this discovery my opinion as to the *casus morbi* became considerably modified, and I was inclined to attribute, if not *in toto*, at least to a very considerable extent, many of the symptoms to this sluggish condition of the bowel, instead of to the dysmenorrhœa. No doubt the uterine affection had a very powerful influence on the girl's bad health; at the same time, when we know the disastrous effects of constipation—rendering as it does the nervous system highly susceptible of morbid impressions, besides acting in this instance as a direct irritant to the womb, in consequence of the close proximity of the hardened fæces to the organ,—we dare not ignore this morbid condition of the bowel in considering what the factors of disease were in this case. Moreover, it was ascertained that constipation had troubled the patient for a longer period than the dysmenorrhœa had, and she informed me that she rarely felt completely relieved after she had been at stool.

The treatment consisted in having the uterine sound passed bi-weekly; and an enema of a tablespoonful of salt to a pint of tepid water was ordered to be used every alternate day.

Before the monthly period came round her health was decidedly improved, so that the improvement could not be due to any alleviation of the uterine disorder. After about six weeks' treatment she went home, quite recovered. It is now nearly two years since the treatment was carried out, and I understand there has been no return of the dysmenorrhœa, and the young lady's health is otherwise all that can be desired.

CASE 7.—Mrs. S——, aged twenty-six, is a highly nervous lady who can hardly speak without bursting into tears. She complains of great prostration and want of energy. She sleeps pretty well, but never feels refreshed in the morning. She is troubled very much with dreams and sometimes with nightmare. The patient is very low-spirited, and takes a very gloomy view of life. There is little or no appetite, and when she does eat she always wishes she had not done so, as there is so much discomfort after a meal. She is losing flesh; and complains of palpitation of the heart, severe frontal headache, bad taste in the mouth (especially in the morning), severe pain over the lumbar region, and a bearing-down sensation "as if her inside were coming down." Her

ulse is very feeble. She says her bowels are very costive, nd, though her menses are regular, there is always severe ysmenorrhœa.

A vaginal examination reveals retroflexion of the uterus, and the rectum loaded with hardened fæces, which are pressing on the fundus of the uterus, and actually tending to hold it in its abnormal position. The womb measures three inches, and its walls are soft and flabby. My impression on making the examination was, that the constantly loaded condition of the rectum was really the cause of the malposition of the organ, as the patient had never been pregnant, and the walls of the uterus were flaccid and therefore more easily bent out of position.

Whilst attending to the uterine ailment, I ordered an enema of salt and water to be used every alternate day, which gave the greatest possible relief to the patient, and she gained strength so rapidly that at the end of three months she expressed herself as feeling perfectly well.

It would be quite possible to go on quoting cases almost *ad infinitum*, all of which would demonstrate the baneful effects of constipation; but I trust that the few I have selected will be sufficient to direct the attention of the profession more particularly to this morbid condition, which proves itself not only to be a most distressing disease, but is the superinducing cause of so many other disorders. It will be observed that I have not related any cases of adult males who have been treated by me for this affection, but it is not because there is a paucity of such cases, for although females are much more prone to this disease, and suffer more from it than members of the male sex, yet one often meets with constipation in men which not only itself produces a whole host of distressing symptoms, but when allowed to go on unchecked, helps to develop what but for it might still remain latent disease. I do not happen to have notes of such cases, but I can recall to my mind quite a number of instances where constipation was really the cause of great mental depression, irritability of temper, and weakness of body, these all being attributed to want of tone, but which speedily disappeared when enemata were regularly employed to keep the bowels in a state of action.

Glasgow.

CASES OF CONGENITAL HYDROCELE OF THE TESTIS CURED BY ACUPUNCTURE.

BY SAMUEL OSBORN, F.R.C.S.,
ASSISTANT-SURGEON TO THE SURGICAL APPLIANCE SOCIETY.

CASE 1.—J. D——, aged six months, has suffered from hydrocele on the right side since birth. He was ordered by a surgeon to wear a truss, and has done so for one month, the last fortnight wearing it night and day. No alteration has occurred in the size, and his mother fancies, if anything, it is somewhat larger. The scrotum is swollen and red from the constant pressure of the truss, which was consequently discontinued, and the scrotum ordered to be bathed twice daily with cold water. The hydrocele is transparent by transmitted light, oval in shape, and gives only a slight impulse on the patient's coughing. There is no alteration in size when the patient is in the recumbent posture.

Jan. 15th.—Swelling and redness have disappeared. The hydrocele was punctured in three places with an ordinary suture needle; the flat-shaped needle after insertion being turned at right angles to the wound of entrance. A small quantity of clear hydrocelic fluid escaped, the greater quantity passing on manipulation into the cellular tissue, external to the tunica vaginalis. The bathing of the scrotum with cold water three times a day to be continued.

16th.—The swelling is much larger than it has ever been, accompanied with much redness, extending up to the navel, and involving the right iliac region and corresponding half of the umbilical region. Cold water application still continued.

17th.—Swelling beginning to go down, and the redness to disappear.

29th.—Hydrocele has entirely disappeared.

Feb. 16th.—No reaccumulation of fluid.

CASE 2.—E. H——, aged two years, made application for a truss, but the child was found to have a hydrocele on the right side, which had only been noticed six weeks previously. Evaporating lotions and cold water had been used for the last six weeks without benefit. Hydrocele is transparent, oval in shape, and gives hardly any impulse on the patient's coughing.

Oct. 26th.—Hydrocele punctured in one place with a broad needle, and about a tablespoonful of perfectly clear fluid withdrawn. Douching of scrotum with cold water ordered several times daily.

Nov. 16th.—Hydrocele is less by two-thirds the size it was previously. Cold douching to be continued.

Dec. 30th.—No sign of hydrocele.

CASE 3.—E. B——, aged nine years, applied to the Surgical Appliance Society for a truss, supposing himself to be ruptured. He was found to be suffering from a congenital hydrocele of the right side, which had been noticed when an infant by his mother, who states that it then looked "puffed like a bladder." The last three months it has altered in character, "becoming larger and more solid." It is now pear-shaped, transparent by transmitted light, and gives a distinct impulse at the neck on the patient's coughing, and is diminished in size on assuming the horizontal posture.

Dec. 10th.—Punctured by an ordinary suture needle in one place, and about a teaspoonful and a half of clear water-like fluid came away. Sac freely manipulated, some of the fluid escaping into the subcutaneous areolar tissue. Patient ordered to lay up in bed for a week, and an ice-bag to be applied to the scrotum, so as to keep up contractility in the muscular dartos.

18th.—No alteration; sac continues empty, as after the tapping.

Jan. 13th.—The mother writes saying, "The swelling has quite disappeared, and the child perfectly well."

Remarks.—These three cases are probably all instances of congenital hydrocele of the testis, the communication with the abdomen in each case being more or less distinct, according to the size of the opening of the funicular process into the peritoneal cavity. They are also all on the right side of the body, this being accounted for by the right funicular portion of the vaginal process of peritoneum being the later of the two in closing; the left testicle descending prior to the right in the majority of instances. It is also noticeable that the fluid in these cases is generally clear, and more like the fluid of the peritoneum than in those cases of hydrocele which are shut off from that cavity.

Maddox-street, W.

FURTHER NOTES ON A CASE OF LEPROSY ASSOCIATED WITH FILARIA.[1]

BY JOSEPH BANCROFT, M.D.

SINCE my previous account of this case I have seen the patient frequently. I removed a carious phalanx from a finger of the left hand. The finger was extremely painful afterwards, though otherwise anæsthetic. The stump was dipped often in laudanum for relief, after which it healed. The blood that was lost during the operation was collected, diluted with water, and allowed to subside in a conical vessel, but no filariæ were seen either in the blood or in the tissues of the amputated phalanx. I examined blood repeatedly afterwards, taking it from enlarged cutaneous veins of the thigh, the lobe of the ear, and the fingers, with negative results. Bullæ on the fingers have repeatedly formed during this winter; they appear like the results of contact of a hot body, and contain serum and coagulated fibrine, like the jelly blister produced by cartharides. No microscopic peculiarity was noticed in the contents. There are enlargements on the musculo-spiral and median nerves. One of these causes a peculiar thrill when slightly pressed. They are above the elbow, in the neighbourhood in which abscesses form, containing parent worms in the lymphangeitis cases. Patient tells me that the anæsthetic patches on his arms and body keep quite dry when he is visibly perspiring.

About a month ago a bulla formed over the dorsal surface of the last joint of the right forefinger. The bulla burst; an ulcer formed, which penetrated the joint, destroying the extensor tendon; the flexor then drew the phalanx a little

[1] Recorded in THE LANCET for May 17th, 1879, p. 696.

towards the palm. Much pain was experienced, though to contact the finger was devoid of sensibility. Patient would insist on having the finger removed. I cut through the first phalanx a little above the metacarpal joint. There has been much less pain in the healing of this stump, owing, I imagine, to more diseased surface being removed. All the blood was collected and set aside, but in it no filaria was found. The tissues of the dissected finger gave also negative results, except the diseased scrapings of the joint. In these one filaria was found, which under the ¼-inch was seen to coil itself up repeatedly into a spiral of four close rings, after which it suddenly straightened itself. The presence of a worm which fills the field of the ¼-inch, and sets all the blood-cells into violent motion, when once seen, does not admit of doubt.

Case 11 of my first series in the Pathological Society's Transactions suffered in June from two abscesses of the arm. I obtained from each, in the matter discharged, a dead parent worm. I searched over much blood before I found a single microscopic filaria. In winter it would seem that embryonic worms are not given off in great numbers.

Brisbane, July, 1879.

A CASE OF FATAL PERITYPHLITIS FROM PERFORATION OF THE VERMIFORM APPENDIX BY AN ORANGE-PIP.

BY JOHN SERVICE, L.R.C.S. & L.R.C.P. EDIN.,
SURGEON TO THE BOLDON COLLIERY, NEWCASTLE-ON-TYNE.

THE following case, which occurred in the practice of my friend Dr. Whamond, of Jarrow, whom I was assisting at the time, proves, I think conclusively, that *foreign* bodies do sometimes perforate the cæcal appendix with fatal results.

Sarah Jane P——, of Monkton, in the parish of Jarrow, aged eleven, previously in good health, was suddenly seized on the night of Dec. 1st, 1877, with a severe pain in the right iliac region. When seen shortly after, she was lying in bed with the right leg drawn up, an anxious expression on the face, and respiration performed with evident fear. Temperature slightly over normal. The chest sounds were natural; there was no appearance of spinal disease, no deposit in the urine, and the bowels were unaffected; the tongue was moderately clean, nor did the girl complain of headache or thirst. An opiate was given and a blister applied to the part. Next day her condition was much the same, and the pain, though unaffected by large doses of opium, would yet, seemingly irrespective of any treatment, intermit for as long as three hours at a time. There was now slight fulness and slight percussion-dulness over the seat of pain, but both were very trifling and not constant. Her condition became gradually worse, rapid weak pulse, furred brown tongue, &c., while the pain extended over the whole abdomen. Death occurred suddenly, with vomiting of black matter, at 9 A.M. on Dec. 14th, thirteen days from the beginning of the illness.

Necropsy, thirty hours after death.—The body was fairly nourished, and of the average size for the age. There were no external marks save that of the blister. The abdomen only was examined. An incision having been made through the linea alba, the peritoneum was found to be inflamed and adherent to the bowels. On section a large quantity of pus welled out from the right iliac fossa, and, together with what was now dipped and sponged out, would amount to fully a quart. During the removal of the fluid a little greyish-white substance, of about the size and appearance of an orange-pip, was discovered and laid aside for subsequent examination. A large ashy-grey membrane, equal in size to a small saucer, was found attached to the cæcum, and a portion of the same material adherent to the tip of the vermiform appendix, which was perforated and had evidently communicated with the pyogenic membrane referred to. The kidneys and ureters were found to be healthy. We concluded that death had resulted from peritonitis, due to the bursting of a large abscess, which again had been caused by perforation of the cæcal appendix by a foreign body impacted there, and a consequent extensive amount of perityphilitic inflammation.

On examining the foreign body found, it had the appearance already described, was soft, and cut readily with a knife. It was insoluble in water cold or hot, insoluble in nitric and in hydrochloric acids, but slightly soluble in nitro-hydrochloric with heat. The solution gave no precipitate with ammonic oxalate nor with hydro-disodic phosphate, proving it to be neither lime nor a phosphate; nor did it effervesce with an acid, showing the absence of a carbonate. On microscopic examination, *a section of the substance showed a distinct fibro-cellular structure mingled with a soft débris.* Upon inquiry being made, it was found that the girl's father had brought home some oranges about a week previous to the beginning of her illness, and it was also ascertained that of these she ate one on the 25th of November; that was six days before her illness began and nineteen days before death.

That from the presence of glandular elements within the appendix natural secretions may become the nuclei of small calculi, nobody, I think, can doubt; and even fæcal matter, as in the case reported by Dr. Maunsell Collins in THE LANCET of December 13th, 1879, may occasionally lead to the same result; but, on the other hand, it seems to be equally certain that this trap in the alimentary canal may sometimes catch larger travelling substances, and has often done so, notwithstanding the high authorities quoted by Dr. Collins to the contrary. It would almost seem, indeed, as if popular belief pointed to some salutary lessons of the kind in the past. Who does not remember having been cautioned in childhood against the swallowing of fruitstones, "because they were poison" (as some of course are), or because "a tree would grow up into the throat and produce suffocation"?

West Boldon.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

SURGICAL CASES ILLUSTRATING WOUND TREATMENT AND REPAIR.

(Under the care of Mr. BRYANT.)

THE following cases show that serious wounds may be made and repair take place under a plan of simple dressing, without the occurrence of any important rise of temperature or serious disturbance of the constitutional state.

Recurrent Sarcoma of Breast; Excision; Primary Union. (From notes taken by Mr. C. L. Jones.)—Matilda H——, fifty-one years old, was admitted into Lydia ward on April 30th, 1877. She had been in the hospital in October, 1874, and her right breast was then excised. The wound healed partly by primary intention and partly by granulations. About two years after that operation she noticed the tumour began to grow again at the lower part, and, latterly, had increased very rapidly. When admitted she appeared a fairly healthy-looking woman. There were enlarged veins over the remains of the right breast, and a large transverse scar entirely healed. There was a tumour rather larger than half an orange occupying the situation of the breast; it was irregularly circular in form; the surface felt irregular, lobulated, not very hard, rather spongy, not adherent to skin or pectoral muscle, and there were no enlarged glands in the axilla.

On May 15th the patient was placed under the influence of chloroform, and the growth was excised, the edges of the wound being brought together with sutures. The growth appeared to be a typical sarcoma. There was some sickness after the chloroform, and she had no sleep. Temperature 101·3°; pulse 120. On the 17th she had quite recovered from the operation, and the wound seemed to have healed by first intention; temperature 100°, pulse 108. On the 24th the wound had healed, and on the 25th she left the hospital. After the 17th the temperature never exceeded normal.

Recurrent Carcinoma after Excision of Breast; Operation; Relieved. (From notes by Mr. C. L. Jones.)—Esther P——, aged fifty-eight, was admitted into Lydia ward on May 1st, 1877. She had been a patient during the previous summer. When, on Aug. 22nd, her right breast was excised for carcinoma, two indurated glands were at the same time removed from the axilla. She was discharged cured, but about four months after the operation a small sore appeared on the site of the scar. She poulticed it, but it gradually grew. Since the operation she had never had proper use of her right arm; there was no absolute paralysis, but the middle and index fingers became contracted, and all movements were more limited than on the left side; sensation was perfect, but the arm was smaller than the left. When admitted there was a circular ulcer on the centre of the scar in right breast, about two inches in diameter; the surface was raised above the skin by exuberant granulations, the edges were everted and thickened, and there was a thin scanty discharge. There were no indurated glands in axilla. On the 11th the tumour was freely removed under the anæsthetic mixture of alcohol, chloroform, and ether. Bleeding was arrested by torsion and pressure. The edges of the wound were not brought together, but left to granulate up. There was a little sickness after. On the 13th the temperature was 98·2°; the 14th, temperature 97·4°; the 16th, temperature 99°, pulse 160; and on the 17th, temperature 98·5°, pulse 155. On the 24th the wound was granulating and healing well; it had been dressed with terebine and oil. On June 2nd she was discharged.

Cancer of Breast; Removal, Recovery. (From notes by Mr. F. V. Duckworth.)—Louisa P——, aged fifty-seven, was admitted into Lydia ward on April 1st, 1879. She was married, but had had no children. Two months before she noticed a swelling about the size of a walnut on the outer side of the right breast; it was painful; the skin over it was red and tight.

On admission the swelling was about the size of a pigeon's egg. The skin was infiltrated, red, and deeply puckered. The parts beneath were also infiltrated, as there was a good deal of fixity. There was pricking sensation at times, and a burning pain at chest. The nipple was not retracted, and the axillary glands were not enlarged.

On the 4th, under chloroform, the breast was removed by two curved incisions. The edges were brought together with sutures and strapping, after being washed with iodine and water, and the parts were dressed with terebine and lint. The growth consisted of a well-marked nodule of scirrhus. On the 7th the patient complained of pain on inspiration. The dressings were removed; the parts looked red, but were well. There had been a little bleeding. On the 22nd the wound and granulations looked very healthy. The patient complained of pain in the part. Bowels confined. On May 9th, the granulations, being rather weak, were touched with nitrate of silver. On the 17th the wound was healthy, though there was some discharge. Discharged.

Temperature Chart.—On April 5th the temperature was 99·1°; 7th, 99°; 8th, 99·4°; 9th, 99·1°; 10th, 99·2°; 11th, 97°; 12th, 99°; 14th, 98°. From this time the temperature remained normal.

Cancer of Breast; Excision; Recovery. (From notes by Mr. Dashwood.)—Jemima L——, aged sixty, was admitted into Lydia Ward on June 24th, 1879. Patient's paternal grandmother died of cancer. Patient was a married woman, and had always enjoyed good health. About two years before she noticed a hard lump like a marble in the left breast on the inner side of the nipple, and it had steadily increased since catamenia ceased, ten years before admission. On admission patient had a large hard tumour in the outer part of the left breast. It felt nodular; was freely movable on the chest wall. The skin was red and not movable over the tumour; the veins at this point at upper part of left breast were prominent. There was a hard lump in the left axilla. Mr. Bryant pronounced the case to be one of cancer.

On June 27th, under chloroform, two excisions were made from the axilla to the lower and inner side of the breast; the skin and subcutaneous tissue were dissected off, and the whole breast removed. The tumour did not appear to be adherent to the pectoralis muscle. Several small arteries were twisted, the wound was washed with iodine-water, and the edges were brought together with about fourteen silk sutures, and terebine dressings were applied; a drainage-tube was introduced.

On July 4th there was a good deal of discharge, which had evidently been too much confined. On the 7th the sutures were removed. On the 22nd the wound was completely healed.

Temperature Chart.—June 28th, morning, 99·1°; evening, 100·2°; 29th, 99·8°; 30th, 98·3°; July 1st, 99·9°; 2nd, 100·6°; 3rd, 101·4°; 4th, 99·6°; 5th, 98·3°. From this time the temperature remained normal.

In this case, it may be noticed, the evening temperature was 100·2 the night after the operation, and then dropped to 99, rising but once, when some slight retention of discharge took place.

(The series will be continued in a future number.)

TUNBRIDGE WELLS INFIRMARY.

CASE OF LARGE INCARCERATED CONGENITAL INGUINAL HERNIA OF LARGE INTESTINE IN A CHILD FOUR MONTHS OLD; OPERATION; RECOVERY.

(Under the care of Mr. MANSER.)

FOR the following notes we are indebted to Mr. John Footner, F.R.C.S., house-surgeon.

F. W. B——, a male child, aged four months, was admitted on August 12th, 1879, suffering from a large tumour of the left side of scrotum.

The patient was the subject of a congenital left inguinal hernia, of which the mother had taken no notice. Two days before admission the child suffered from constipation, and on the following day from frequent and persistent vomiting. The latter ceased on the day of admission, but the former remained, and the child was taken to a doctor, who recognised the existence of a hernia, and applied the taxis, but, failing to reduce it, recommended the child's instant removal to the infirmary.

On admission there was found to be a large elongated oval tumour extending from the testicle up into the left inguinal canal; the testicle could be felt below it. The tumour was of almost stony hardness, but on careful examination it was found that it pitted slightly on pressure. There was a slight impulse to be felt in it when the patient cried. A soap-and-water enema was administered with no result, followed by the application of an ice-bag to the tumour.

The same evening—the child being very weak and feverish, pulse 170, temperature 103° F., and there being very little doubt that the tumour was a hernia—chloroform was administered, and, after a short and ineffectual application of the taxis, the usual operation for the relief of strangulated inguinal hernia was performed. The tumour was then seen to consist of a knuckle of large intestine, about three inches and a half in length, firmly distended with solid impacted fæces. The bowel was not strangulated, and very slightly congested. The sac contained a small amount of clear amber-coloured serum. The abdominal ring was enlarged by incision and by a process of gradual kneading. The intestine was at length emptied sufficiently of its contents to allow its being returned into the abdominal cavity. During this process the bowel was necessarily subjected to a considerable amount of handling. The wound was then stitched up and dressed with carbolic oil.

Almost immediately after the operation the bowels were freely opened. The wound healed by the first intention, and the child recovered without a bad symptom, and was discharged from the infirmary cured on August 22nd.

Remarks.—The result of this case shows what a large amount of handling healthy intestine will bear with impunity. The bowel was in this instance of necessity subjected to much and long-continued pressure, yet no harm resulted. It also shows the evil of feeding such young children with biscuits. The mother had for about a fortnight before the impaction of fæces occurred been in the habit of feeding her child with biscuits soaked in milk, and to this cause may probably be attributed the impaction of solid fæces in the large intestine.

THE STRATFORD-ON-AVON INFIRMARY.

MALIGNANT PAROTID TUMOUR.

(Under the care of Mr. HARRY LUPTON.)

THOMAS C——, aged forty-five, presented himself at the out-patient room on Dec. 3rd, 1878, with a tumour extending from the petrous portion of the temporal bone to about two inches below the angle of the jaw longitudinally, and

from the ramus of the jaw about three inches posteriorly, the tumour being prominent, and about the size of a closed fist.

The history he gave was as follows:—About ten years ago, after an attack of "low fever" (typhoid ?), he noticed a small lump about the angle of the jaw. For some years its condition remained unchanged, but about two years since it began to enlarge rapidly, and during the past six months its progress had been very rapid, and it had become very painful, insomuch that his life was a burden to him, and he could not lie on his right side or rest in any comfort; he had been treated outside, but the tumour continued to increase, and he was now very anxious to have it removed. The tumour was hard, except at the most prominent part, and fairly movable, except at the upper part, where it was evidently firmly attached to the petrous portion of the temporal, and there was evidently a process dipping in under the ramus of the jaw; the surface was red and angry-looking, but there was no distinct fluctuation, even at the softest part of the tumour.

Under the circumstances Mr. Lupton was loth to interfere with it—it looked too malignant; but the man was anxious that something should be done for him, and Mr. Lupton's colleagues, Messrs. Rice and Mason, thought that removal migh be attempted. The matter was, therefore, put fairly before the man in all its aspects, not omitting the risk of removing a large growth in such a situation, and its possible rapid recurrence. He decided to have the operation done. Accordingly, on Dec. 10th, 1878, he was admitted, and on the 12th, with the assistance of Messrs. Rice and Mason, and Mr. Ross (Mr. Mason's assistant), Mr. Lupton proceeded to remove it. It was found to be more generally adherent than had been anticipated, and there was a strong fibrous adhesion to the angle and ramus of the jaw, and it dipped under the jaw, reaching close to the mucous membrane of the mouth; it was adherent by its deeper surface to the underlying structures, and very firmly adherent for some distance to the petrous portion of the temporal. The operation lasted nearly two hours, during which time chloroform was administered by Mr. Ross.

The edges of the wound were brought together by silver-wire sutures (a space being left at the lowest part for the escape of discharge), and covered with carbolised lint, over which a good pad of tenax was laid to absorb any discharge. No vessel required either ligature or torsion.

The wound was first dressed on the third day after the operation. There was union in the upper part of the incision (about one-third), and a little healthy discharge had escaped from the lower; the whole aspect of the wound was healthy. Pulse 80; temperature 100°; respiration 23.

It went on well until about Jan. 7th, when it was evident that the growth was recurring. On the 9th there was hæmorrhage from a small ulcerated point, the size of a pin's head, about half an inch anterior to the line of incision; and this was followed by hæmorrhage—sometimes more, sometimes less—on the 12th, 17th, 20th, 25th, and 26th, the last two being from newly ulcerated points near the angle of the jaw; there was no hæmorrhage from the line of incision.

Wishing to go home, he was, at his own request, discharged on Feb. 17th, 1879.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Treatment of Traumatic Salivary Fistula.—Suture of divided Median Nerve.—Disease of Finger-nails, probably Strumous.—Results of Excision of Lower Ends of Radius and Ulna for Myeloid Tumour.—Treatment of Popliteal Aneurism by Esmarch's Bandage.

THE ordinary meeting of this Society was held on the 13th inst., the President, Dr. E. H. Greenhow, F.R.S., in the chair. At the opening of the business the President laid on the table a copy of the Index to the Transactions, which had just been prepared by Mr. Wheatley. Mr. H. Morris read notes of a case of salivary fistula, and Mr. Hulke of a case of sutural junction of a severed ulnar nerve. Dr. Sangster contributed notes of a case of disordered nutrition and exfoliation of the nails, which had been previously shown to the Society; and the paper which gave rise to most discussion was one by Mr. Heath on popliteal aneurism treated by Esmarch's bandage. Mr. Heath laid stress upon the value of keeping the sac tense with blood as promoting coagulation, and in his cases the application of the bandage was maintained for a longer period than has hitherto been deemed advisable.

The following cases were shown in the ante-room:—A patient from whom a Myeloid Tumour of the Radius was removed four years ago by Mr. Henry Morris; a case of Ichthyosis by Dr. Bristowe; of Anæsthetic Leprosy by Dr. Crocker; and one of Trade Neurosis (spasmodic form) by Dr. Allen Sturge.

Mr. HENRY MORRIS read notes of a case of Traumatic Salivary Fistula treated by passing a fine catgut bougie from the mouth along Stenson's duct. The case was that of a man admitted into the Middlesex Hospital on June 24th, 1879, having been stabbed in a fray at a public-house. There were wounds on the arm and forearm, in the right occipital region, and on the right cheek. In four days these were nearly well, except that a sinus whence saliva oozed remained on the face, and the mouth felt dry on that side. The mucous membrane not being injured, Mr. Morris thought the parotid duct might only be partially severed, and passing a fine catgut bougie into the duct, through the buccal orifice, it appeared at the wound. The proximal part of the duct was then sought for, and the bougie guided into it. The case did well, but it was not until July 15th that saliva wholly ceased to escape through the wound. Mr. Morris remarked upon this method of treating salivary fistula, as affording encouraging results by reopening the natural passage, and, if such could not be effected, the duct might be opened into the mouth. If the orifice of the duct, which is its smallest part, were closed, it might be reopened.

Mr. HULKE read notes of a case of Sutural Union of the Median Nerve in the lower part of the Forearm five weeks after division by a broken glass bottle; followed by return of function. The patient in washing bottles cut his forearm, severing the median nerve and artery above the wrist. The artery was secured by torsion, and as on the following day, when Mr. Hulke first saw the case, immediate union appeared to be taking place, he hoped that the divided ends of the nerve would unite. But suppuration followed, and cicatrisation was not completed till five weeks after the injury, and the anæsthesia of the fingers supplied by the median nerve persisted. An attempt was then made to effect sutural junction of the severed nerve, Esmarch's bandage being applied, the wound was laid open, and the bulbous nerve-ends, which lay three-quarters of an inch apart, exposed. About one-eighth of an inch was cut off each of the ends, which were then approximated by flexing the hand and by slight stretching of the proximal end of the nerve. Fine sutures were used to secure the divided parts, and the limb was placed on a specially devised splint. After three weeks passive movement was employed at the wrist; and about four weeks after the operation sensibility had returned to nearly all the parts supplied by the nerve, except the terminal phalanges of the index and middle fingers. The case afforded a hint also as to similarly joining severed tendons, for before the operation the long flexor tendon was almost functionless. The dissection set them free from the scar-tissue, and the subsequently flexed position of the wrist favoured their union, so that eventually they acted well. The case showed the propriety of securing severed nerves in all *fresh* wounds. Were this done immediately better results might be anticipated.—Mr. MARSH mentioned a case recently under Mr. Holden's care, where the operation was done some time after the injury. Return of function began within twenty-four hours of the operation. Did Mr. Hulke stretch the nerves, as in his previous case?—Mr. HULKE said that he pulled down the nerve-sheath of the upper fragment with considerable force. He used very fine silk sutures. —The PRESIDENT had had several cases of tic which were treated by nerve-section; but in every case the pain returned after a time, the divided nerves re-uniting.

Dr. SANGSTER contributed a case of Disturbed Nutrition, with Suppuration and Exfoliation of the Nails, probably of strumous origin. The patient was a girl seven years of age, one of seven children, two of whom had died from chest

disease. The child was delicate, had suffered from enlarged cervical glands and ulcerative stomatitis. When seen, the terminal phalanges of the fingers were red and hot, some of the nails were blackened, others ridged, and others stunted and misshapen, and in addition there was ulceration and suppuration in the matrix of some of them. The change had been first noticed twelve months before. There was no symmetry in the distribution of the affection. No history of syphilis in the case; no fungus found in connexion with the local lesion, so that Dr. Sangster was forced to conclude that the affection was probably due to struma in a child of "dartrous tendency." Mr. Hutchinson describes a somewhat similar case in his clinical lectures, but in all the other cases mentioned by him he describes a great increase in the epidermal layers, which was not the case in this instance. The suppuration was probably due to accumulation of dirt beneath the diseased nail.

Mr. HENRY MORRIS, on the invitation of the President, introduced his case of a woman from whom he had removed a myeloid tumour of the radius about four years ago. The case is recorded in vol. x. of the Transactions. The lower part of the radius, and four inches of the ulna, were removed. Dr. Gross, of Philadelphia, in a recent paper, had collected nine cases, which he regarded as unsuccessful, including this one, the details of which, however, he had only gathered from a journal report; for the patient's hand was sufficiently useful to enable her to follow her household duties. She could sew, wash linen, using her index and middle fingers, and the case showed that excision should not be condemned too hastily as opposed to amputation. Mr. Morris wished now that he had removed as much of the ulna as of the radius, for from retraction of the parts the end of the former projects over the carpus.

Mr. C. HEATH read a paper on two cases of Popliteal Aneurism, cured by the application of Esmarch's bandage. CASE 1. A coalminer, aged thirty-two, admitted into University College Hospital on October 22nd, 1879, with a right popliteal aneurism, attributed to his working in a cramped position. No history of injury, sudden strain, or syphilis. He had had pain in the ham ten weeks before admission, and soon after the swelling appeared, which gradually enlarged to the size of a hen's egg. The right posterior tibial pulse was not perceptible. On Oct. 25th, at 3 P.M., half a grain of morphia was injected subcutaneously, and Esmarch's bandage applied to the leg as far as the lower border of the sac. A piece of Martin's bandage was then applied to the thigh from above down, and over it the elastic cord of Esmarch was fixed. The aneurismal sac was thus rendered tense and full of blood. At 4 P.M. bichloride of ethylene was administered and kept up till 6 P.M., when the tourniquet and bandages were removed, the former first. There was no pulsation, but an hour afterwards slight impulse could be felt. A Carte's compressor was then kept on the femoral till 9 A.M. next day. There was no recurrence of pulsation; and on Nov. 14th the case was shown to the Society. He then presented a hard, ovoid, non-pulsating swelling in the ham; and an enlarged artery could be traced on the inner side of the thigh and ham; the posterior tibial pulse could not be felt.—CASE 2. A potman, aged thirty-seven, muscular and healthy, without signs of general vascular degeneration. His aneurism was longer and narrower than the other, and there being no bruit, it was thought to be fusiform. Pain in the popliteal space had existed for six weeks. There was no history of syphilis, but he had rheumatic fever in 1874. On Dec. 3rd, 1879, Esmarch's bandage and tourniquet were applied for three and a half hours, the patient being under the influence of bichloride of ethylene. Pulsation immediately returned on removal of the bandage. An attempt to compress the artery by Carte's tourniquet failed from the pain caused by it. On Dec. 4th digital compression was tried from 1.30 P.M. to 4.30 P.M., and flexion from 4.30 to 11 P.M. On the 5th, pain, but still pulsation in the tumour, and flexion again had recourse to for four hours. On the 8th Esmarch's bandage was applied for three and a half hours, followed by flexion for six hours. On the 9th the tumour was harder, but still expansile. On the 10th no pulse could be felt in the posterior tibial, and an enlarged artery was observed on the inner side of the patella. There was much pain in the leg. The tumour was consolidated, and recovery was established. In the first case one application of three hours practically sufficed for the cure, which was complete two weeks afterwards. The second case required a reapplication, and Mr. Heath laid stress on the fact that at the first trial the tension in the sac was but slight. No bandage was placed over the aneurism, and the elastic band was adjusted over the thigh. Of the four cases reported last year by Mr. Hutchinson, in only one was solidification complete, and in three out of the four cases recourse was had to digital compression. Mr. Hutchinson points out that the bandage was only applied for one hour, and no attempt was made to empty the sac. Mr. Heath urged that any diminution of the contents of the sac would tend to prevent coagulation; for he was under the impression that a sac filled with blood under high pressure would have its contents more rapidly coagulated. An attempt he had made to prove this experimentally had, however, yielded negative results.—Mr. SYDNEY JONES said that the cases showed that Esmarch's bandage could be kept applied for three hours without any serious detriment to the nutrition of the limb. He had used the bandages in three cases of aneurism; one axillary, without success; the others popliteal, with success. But he had only kept on the bandage for one hour in each case, and in two cases its use was followed by digital compression, and this again in one instance by the reapplication of the bandage. He applied it tightly over the leg from the foot to the knee, then loosely over the aneurism, and again more tightly over the thigh, where the ligature was put on. He thought that allowance should be made for the contraction of the sac, which was shown by Hunter to fo' w on his plan of ligature.—Mr. HULKE thought the plan of keeping the sac in full tension involved some risk of its rupture.—Mr. MARSH asked why Mr. Heath removed the tourniquet first and the bandage afterwards, in preference to the reverse plan.—Mr. CROFT had reported a case of popliteal aneurism cured by the interrupted bandage in January, 1878. The bandage was left on for one hour, and within six hours the aneurism was absolutely solid. Since then he had treated another case. The patient was a man thirty-six years of age, who had had syphilis, and who had noticed the swelling in the ham (which was of the size of a small orange) for ten weeks. The interrupted bandage was applied for an hour, when, pulsation recurring, digital compression was had recourse to, and kept up for two hours and a half, when the cure was completed. He asked what was the least amount of time during which the bandage could be applied for cure; for its lengthened application, added to the prolonged influence of anæsthetics, could not influence the case for good. In his own two cases one hour's application sufficed, but it seemed that in Mr. Heath's case even three hours and a half was inadequate. Then he thought the prolonged use of anæsthetics may retard coagulation. It was not necessary to get complete coagulation to effect a cure; semi-coagulation might start the complete process.—Mr. T. SMITH agreed with Mr. Jones that Mr. Heath's cases proved that a limb could be deprived of its blood for three hours without injurious effect. This was important, for under an opposite belief he (Mr. Smith) had limited the time of application to one or one and a half hours, and then varied it with the tourniquet. It was an important matter of detail to apply the india-rubber band *over* the bandage, as the risk of injuring the nerve-trunks by the pressure of the ring was thereby obviated. He had treated five cases by this method, and had noticed that sometimes the rapidly-formed clot was not permanent. Thus on three separate occasions he had known a clot to disappear, so that ligature had to be had recourse to. No doubt there were differences in the composition of the blood favouring coagulation or otherwise, and thus the time required for consolidation to take place would vary in different cases. As to the influence of anæsthetics on the blood, he said that the case of most rapid coagulation he had seen was one where no anæsthetic was had recourse to (other than a pipe of tobacco and the evening paper). The patient was a member of our profession, and consolidation occurred within two hours.—Mr. HULKE remarked, in reference to deprivation of blood impairing the vitality of a limb, that in a recent number of Pitha and Billroth's Handbook cases of successful skin-grafting are related, where the grafts were taken from corpses as long as from four to twelve hours after death. In one case as many as two hundred grafts were made.—Dr. MAHOMED suggested that coagulation might be promoted if an aneurism rendered tense and full of blood by the use of the bandage, as described by Mr. Heath, were punctured with the galvanic needle, or were injected with substances to favour clotting—e.g., perchloride of iron.—Mr. MORRANT BAKER said that he had contributed details of a case treated without anæsthetics in the last volume of

St. Bartholomew's Reports. The bandage was kept on for an hour, when, pain being severe, digital compression and then a shot-bag were applied to the femoral artery, then the bandage for another half an hour, and, lastly, digital compression for the second time, when consolidation occurred. The question of the effect of anæsthetics on the blood was important, and he asked Mr. Heath whether he was guided by this in choosing bichloride of methylene. The strong cardiac stimulant action of ether might require more pressure to be applied to arrest the flow of blood.—Mr. T. SMITH was reminded by Mr. Baker's remark that in the case he had mentioned, where no anæsthetic was used, it was found almost impossible to compress the artery until the patient was smoking tobacco.—Mr. CROFT said that in his two cases no anæsthetic was inhaled; the patients only had one-third of a grain of morphia injected subcutaneously.—Mr. HEATH, in reply, said that the anæsthetic used in his cases was the bichloride of *ethylene*—a safer preparation than the methylene compound. He could not agree that the anæsthetics had much influence; and it was most important to relieve pain, which was one evidence of the cure being effected. Both his cases were small aneurisms, well known to be more difficult of cure than large ones; and one of them was distinctly fusiform. But he quite agreed with Mr. Hulke as to the risk involved by heightening the tension in the case of thin-walled and degenerate sacs. He attributed the first failure in Case 2 to the fact that the sac was not rendered tense; for in Case 1, where it was made so tense that subcutaneous ecchymosis occurred, the cure was rapidly effected. Therefore on the second trial in Case 2 he made the sac tense. The mode of cure differed from that which takes place after ligature, where no doubt some contraction of the aneurism may take place. But here coagulation involves the whole contents of the sac at one time. Broca believed such a "passive clot" to be dangerous, from its liability to break down and lead to embolism, but it had been otherwise proved clinically; and Mr. Heath believed the readiest way to insure the formation of such a clot was to keep the sac distended with blood. The application of the bandage for three hours was purely empirical; but as to any effect on nutrition of the limb, every surgeon must have seen cases where the blood has been cut off from a part for quite as long a time without any ill result. When the subject was under discussion last year, Mr. Bryant said that he had had a case where gangrene ensued probably from a portion of clot being washed away; and it was remarkable that no such untoward results followed in the three cases mentioned by Mr. Smith when the clot disappeared. The tourniquet was removed before the bandage because it overlaid this; and the support given by the bandage would prevent any tendency of the clot being detached when the blood-flow recommenced. He would be loth to supplement these measures by electro-puncture, from which he had not seen any good results. Simple steel needles might be used, but their use would destroy that which it was his aim to secure—viz., heightened tension of the sac.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Treatment of Genu Valgum without Division of Bone.—Treatment and Complications of Nasal Polypus.—The Use of Pyrolytic Vapours in the Treatment of Painful and Spasmodic Affections.

AT the meeting on the 16th inst., Dr. Cockle, President, in the chair, a paper was read by Mr. H. F. BAKER on the Treatment of Genu Valgum without Division of Bone. He did not intend to enter into the respective merits of the several operations for the cure of genu valgum. Whatever opinion might be held as to the risk of cutting into the knee-joint, or producing a compound fracture in its immediate neighbourhood, he thought all surgeons would agree that in many of the cases that came under their notice the deformity was not of so serious a nature that the proposal to perform a severe operation would be entertained by them or consented to by the friends of the patient. It was a matter of great importance that these cases should be entirely cured, lest tilting of the pelvis should take place, followed by lateral curvature of the spine. Cases of genu valgum may be divided into—(1st) those curable by gradual extension alone, and (2nd) by gradual extension after the subcutaneous division of tendon or ligament. To carry out this mode of treatment satisfactorily, in the first place, it is absolutely essential that the patient should be kept off his feet, and the important points to attain in the construction of a proper instrument are that it should keep the knee in an *extended* position and prevent the leg from rotating, at the same time that by its means the knee-joint can be acted upon in the *lateral* direction, with sufficient force to gradually overcome the deformity. He exhibited an instrument by means of which these indications could be fulfilled. It consisted of a trough for the thigh, which takes its bearing on the great trochanter of the femur, and is connected with the leg-splint by a stand on the outer side of the leg, which is provided with a cog-wheel opposite the knee-joint. A band encircles the knee. The special points in which it differs from the trough-instruments in common use are, that it has a wing hinged to the back part of the leg-splint on its inner side, which keeps the heel from rotating inwards, a pad being introduced within the wing to press on the internal tubercle of the os calcis. There is also a rigid bar at the back of the knee, to which is attached a carefully-made leather strap, and its action is to keep the joint in a perfectly extended position, whatever amount of force is used laterally. In those cases, in which it is necessary to divide subcutaneously any tendon or ligament, the same apparatus may be employed, but its application must be deferred for four or five days until the punctures are healed.—Mr. ROYES BELL had, in conjunction with Mr. Rose, brought forward some cases successfully treated by bilateral division of the inner condyles. The cost of the apparatus, the time occupied by the cure, and the subsequent weakening of the joint, were objections to the author's plan. What were the number of cases, the results, and the ages of the patients so treated by Mr. Baker?—Mr. ADAMS wished the author had classified his cases. He considered the splint a good one.—Mr. NOBLE SMITH considered the treatment very successful.—Mr. BAKER, in reply, said that the cases he referred to were cases of true genu valgum, and not cases where the bones are implicated. He recognised the value of Ogston's operation.

Dr. THUDICHUM read a paper on Polypus in the Nose, its radical treatment by the electro-caustic method, and its connexion with asthma. His experience extended over more than three hundred cases. He never employs the forceps, as it is painful, injurious, and ineffectual; and he described cases where severe permanent injuries had followed its use—e.g., partial or entire closure of a nostril, membranous adhesions between turbinate bone and septum, dislocation of turbinate bone, fracture of septum, &c. His own method obviated such risks. The polypus is drawn forward by hooks or fine forceps and then included in the platinum loop of the electro-cautery. "Posterior rhinoscopy," or as it was preferably termed, "Choanoscopy," was useful for diagnosis but not for operating; and he thought Voltolini's and Zaufel's methods imperfect. He showed how atresia of the nostril was opened by burning inward into the closed loop and then excising the projecting parts; enlarged spongy or cavernous turbinate tissue by ablation in pieces. Ablation of the turbinate bone was effected by first cutting away the cavernous tissue with the electrocautery, and then cutting away the bone with nippers, or chisel and hammer. Bony excrescences in polypi were similarly treated. Adenoid tumour of the choano-pharyngeal cavity he had removed through the nose by torsion and the electro-cautery. Epithelioma of the nasal cavity was soft, gave rise to great hæmorrhage, and must be treated cautiously. Concealed abscesses of the nasal cavity, often of traumatic origin, were difficult to deal with. He had once met with abscess complicated with aneurism. He referred also to the treatment of fibro-cartilaginous growths on septum, and to fibrous, osteo-fibrous, and osteo-cartilaginous tumours arising on the roof of the pharynx. Chronic disease in the nose caused by foreign bodies was sometimes difficult to diagnose. Hearing was frequently affected from a polypus pressing on the Eustachian tube, and he had met with many persons who had been thrown out of career, employment, or situation by disease of the nose. The most common complication was asthma; about every fifth case of polypus had or had been suffering at one time from asthma, which frequently disappeared on the removal of the polypus.—Dr. DE HAVILAND HALL had seen two cases in which nasal polypi had set up chronic laryngitis. His first patient had been under treatment for some time for the laryngitis, when

two small nasal polypi were discovered and removed, and the laryngitis then disappeared. In the second case the polypus was suspected, discovered, and removed, a cure resulting.—Mr. SPENCER WATSON was sorry the connexion with asthma had not been more thoroughly worked out. He was surprised to hear that such serious results had attended the removal of nasal polypi by the forceps; but he knew of their frequent recurrence after this method of removal.—Mr. CUMBERBATCH was also surprised to hear of the serious results attributed to removal of nasal polypi by the forceps. He thought it wrong to attempt the removal of pharyngeal polypi through the nose when they could be more readily removed through the mouth.—Dr. JAGIELSKI asked if the author had injected polypi, and Mr. MACHARDY if he had tried Ruge's operation.—Dr. THUDICHUM replied in the negative to the latter query.

The same gentleman read a paper on the Treatment of Asthma, Bronchitis, Phthisis, Neuralgia, &c., by the inhalation of the pyrolytic vapour of vegetable extracts and alkaloids. By a "pyrolytic vapour," he meant a vapour produced by the heat of fire or flame, but without combustion in the air. Confining his remarks to opium, he said that the method and instrument he employed were close imitations of those adopted by the Chinese opium-smoker. He entered into details about opium-smoking in China, and gave the experience of Chinese physicians upon its use in certain diseases, and the objections that had been raised to it. Experiment showed that in the pyrolytic process morphia was volatilised, and when inhaled it entered the blood directly, and produced all its well-known effects quickly and safely. The indications for its medical use were discussed—all neuralgiæ, lead colic, rheumatic affections, cancer, &c. Many patients suffering from inflammation were benefited by the opium vapour. A common "cold in the head," without or with "cold in the chest," was shorn of almost all its most disagreeable symptoms directly. The pyrolytic vapours produced the most direct and useful effect in spasmodic and convulsive nervous affections. Laryngeal cough, sneezing, and nervous asthma were prevented or arrested by its means; and so was the spasmodic breathing of chronic emphysema. Gastralgia, nervous irritability, &c., were at once calmed by it.—Dr. THOROWGOOD had had no experience of opium inhalation. The late Dr. Snow used opium-smoking with much success in his practice.—Dr. ROUTH asked if opium-smoking ever caused sickness.—Dr. DOUGLAS POWELL said that at the Brompton Hospital cigarettes containing one-sixth of a grain of opium had been used in cases of spasmodic cough with considerable success.—Dr. C. T. WILLIAMS asked if it could be inhaled in any way which would obviate the use of a pipe.—Dr. ROGERS had seen opium-smoking used for dental neuralgia at Naples. A pastille was made, ignited, and placed in a long horn, the tip of which was placed against the tooth. The vapour from the pastille was blown in to the tooth with almost immediate relief to the pain.—Dr. THUDICHUM in reply, said that out of thirty cases he had met only with two in which sickness occurred. Cigarettes were objectionable from the acridity of the fumes produced by their combustion.

EPIDEMIOLOGICAL SOCIETY.

Enteric Fever in India, with some Observations on its Probable Etiology in that Country.

AT the meeting of this Society, on the 4th inst., a paper on "Enteric Fever in India, with some Observations on its Probable Etiology in that Country" was read by JOSEPH EWART, M.D. In venturing to bring the subject of enteric fever before the Society, Dr. Ewart said his chief object was to offer the results of his own experience bearing upon the probable etiology of the disease as it presented itself to him, in Europeans and natives, during his service in India. That it had long found a congenial home in our Eastern Empire may be gleaned from the classical works of Clark, Annesley, and Twining. But the distinguished honour of first identifying it there, on the lines laid down by Gerhard, Stewart, and Jenner, belongs exclusively to Surgeon-Major Scriven, of the Bengal Medical Service (now Civil Surgeon of Lahore). Scriven had learnt the error of the prevailing opinions which excluded the affection entirely from India and the tropics, from a post-mortem examination at Meerut in November, 1851, in which the ulceration of Peyer's patches and other appearances characteristic of typhoid were unmistakably demonstrated, whilst the history of the previous symptoms of the case agreed fully with the view entertained regarding its true nature.[1] In 1854 he published some rough notes of three cases met with in Burmah.[2] He subsequently saw, whilst serving at the European General Hospital, Calcutta, one or two doubtful cases which recovered, and three others regarding the nature of which there never was any doubt, and in all these the diagnosis was confirmed by the autopsies.[3] The subjects of the disease were young Europeans residing in such widely scattered localities as British Burmah, Lower Bengal, and the North-Western Provinces.

In the latter part of 1855 Dr. Ewart detected the presence of enteric fever among the native prisoners in the Ajmeer gaol. Three well-marked cases, with an epitome of the symptoms during life, and of the necroptic appearances at the inferior end of the ileum, were recorded and published in the seventh number of the *Indian Annals*. At the concluding part of that paper he remarked:—"I would further observe that, without the most scrutinising post-mortem examinations being made in all those fatal cases which are denominated remittent fever, the conclusion drawn must be attended with some degree of uncertainty. Are not many of these examples of typhoid and typhus fever?" When subsequently attached to the Meywar Bheel Corps, Kherwarrah, Rajputana, he noted several well-marked cases among the Bheels of the regiment and the aborigines of the district. It prevailed more especially in the autumn and early months of the winter season, when the worst forms of malarious fever abounded. This experience, coupled with that obtained at Ajmeer, induced him to inquire, through the columns of the *Indian Lancet*, whether many of the remittent fevers met with in hot climates were not, in reality, either typhus, typhoid, or relapsing fever modified, and often materially aggravated by, the presence of malaria in the system. In 1860, during great scarcity, he noted the prevalence of relapsing fever at Kherwarrah. That many of the so-called malarious remittents were simply typhoid or typhus fever modified, often masked, for a time, by malarious poisoning, he has repeatedly observed, ever since this declaration was made, both in and around Calcutta, and elsewhere in India. In a very large number of remittents, with diarrhœa and severe typhoid symptoms, the chief factor is the typhoid fever poison. When the blood is also surcharged with a large and effective dose of malaria, death often ensues from the combined operation of these causes before ulceration of the agminated glands occurs. This happened in three of his patients, residing in the suburbs of Calcutta, in 1875, who succumbed in from eight to twelve days from what would formerly have been designated as remittent or jungle fever, but in all there was very marked swelling and prominence of the agminated glands. Had these patients survived long enough, ulceration would have been developed in due course. In both natives and Europeans, who have been subjected to the influence of malaria, the fluctuations of temperature in enteric fever are greater than in those who have never been exposed to the action of this poison, the morning remission being so marked as to delude the observer into the belief that he is dealing with a malarious remittent simply, when he is really called upon to encounter enteric fever modified by malarious infection of the system. In his practice at the College and General Hospitals and among the various classes of the community of Calcutta he has seen the disease in all its phases; so mild that persons have gone about their ordinary business during the greater part of the fever, so severe as to end fatally in a few days, either singly from an overpowering dose of the poison, or when complicated with serious malarious poisoning; or to terminate rapidly by uncontrollable hæmorrhage from ulcerated agminated glands, or by perforation of the gut and general peritonitis. In natives the rash is not so easily made out as in Europeans; but, with care, it can often be distinguished in those whose shades of colour verge upon brown rather than black. In a certain proportion of Europeans it is not observed, or escapes notice. But, in fatal cases of this kind, the characteristic and unmistakable ulceration of Peyer's patches are nevertheless found after death. Ever since Scriven directed

[1] Indian Annals of Medical Science. No. viii., p. 512, 1857.
[2] Medical Times and Gazette, p. 70, 26th January, 1854.
[3] Indian Annals. No. viii., p. 521, *et seq.*

attention to the subject, enteric fever has been recognised as a constant factor in the sickness and mortality in the Calcutta General Hospital, to which he was attached for several years. The conduct of the disease has been most carefully watched, and fatal cases, whenever possible, tested by post-mortem examination. The following information is extracted from Dr. Ewart's reports for 1873 and 1874:—

	'65.	'66.	'67.	'68.	'69.	'70.	'71.	'72.	['73.	'74.
Cases of typhoid	17	18	12	5	4	14	15	17	7	11
Died	..	..	3	3	4	3	3	1	5	11	3	5

In Scriven's discovery of enteric fever among young Europeans, and Dr. Ewart's recognition of it among natives, the first thing which attracted attention was the morbid anatomy of the agminated and solitary glands at the lower portion of the ileum. Its endemic occurrence has since been established and acknowledged by Edward Goodeve, Chevers, Fayrer, Morehead, Francis, Cornish, Furnell, Lyons, Moffatt, Massy, O'Brien, Cleghorn, Green, Hanbury, and a host of others, comprising many of the most able and zealous members of the Indian and British medical services practising in India. A place has been assigned to it in the statistical returns since 1871. The general result is that enteric fever now figures as the most fatal form of pyrexial disease met with among the younger European soldiers sojourning in India. Year by year more and more has been heard regarding its extensive prevalence; so that, according to the statistics lately furnished by Dr. Bryden, there occurred, in the course of the three years ending 1876, no fewer than 368 deaths among the European troops in India, ascribed to the ravages of enteric fever. From the facility with which necropsies can be commanded in the British army, most of these cases must have been verified by post-mortem examination. Apart from the much greater number of recoveries which must have been observed, these fatal cases constitute a significant and important outcome of clinical and pathological work by a large body of medical officers scattered over the length and breadth of the land, who were, before they migrated, in the ordinary course of duty, quite as competent, from previous training, education, and experience gained in the medical schools of the United Kingdom, to diagnose enteric or typhoid fever as to distinguish any other grave specific disease or fever in our nosology.

The disturbing influence of malarious poisoning is not specially peculiar to enteric fever. During malarious seasons it has to be taken into account in the diagnosis, prognosis, and management of many other morbid conditions, both surgical and medical. Every experienced physician and surgeon knows how materially convalescence or recovery from acute disease, local and general, is retarded or hindered by its existence in the economy. This fact is, doubtless, equally well recognised by those having experience of the ailments among persons who have finally taken up their abode in this country after protracted residence in the more malarious parts of tropical and tropoidal regions. But, whilst acknowledging so much, there does not seem to be any valid grounds for admitting that there is any more intimate relationship between malaria—the potential cause of genuine paroxysmal fevers—and the poison or materies morbi of enteric fever than there is between the former and the cause of any other affection, whose course it may modify, complicate, aggravate, or even mask. In reviewing this department of the subject, it should not be forgotten that in medicine decentralisation has been the tendency of our times. It behoves us also to bear in mind that formerly it was the fashion to ascribe the invasion and development of small-pox, measles, and scarlatina to the operation of a single causative agency; and that prior to the investigations of Bretonneau, Louis, Gerhard, Stewart, and Jenner, typhus, typhoid, and relapsing fevers were all viewed as springing from a common source. The result, however, of the accumulated observation during the past thirty years has been to demonstrate more and more clearly the non-identity of the poisons exciting typhus, typhoid, and relapsing fever, with as much precision and exactitude as clinical research had proved long before the non-identity of the poisons lighting up an attack of variola, measles, or scarlatina. Such being, with very general consent, the present state of scientific opinion in this sphere of etiology, it is difficult to subscribe to the hypotheses recently promulgated, that, on the one hand, enteric fever in India is only one of the various expressions of malarial poisoning, and that it is only malarious, remittent, or continued fever with intestinal complications; or, on the other, that it may be the product either of a specific cause or of malaria. Experience of enteric fever in India tends to show that malaria—such as is the accepted cause of paroxysmal fevers—is never the cause *per se* of enteric fever in India. And though it is not perhaps necessary, in the existing state of our knowledge, to accept in its entirety the pythogenic theory of its origin or the spontaneous generation of the poison, yet the intensely insanitary condition of the cities, towns, villages, and hamlets throughout India renders it inexpedient to dispense with it as unquestionably the best working hypothesis hitherto advanced to explain the endemic prevalence of the disease there; or to fall back upon the existence of two or more efficient sets of exciting causes for the same specific affection. There is, indeed, no more ground for allowing that enteric fever, as observed in tropical climates, can be roused into activity in the human subject by two or more sets of poisons—viz., marsh miasmata or malaria, and a specific poison too, than there is for proclaiming the theory that any of the contagious exanthemata can be originated by more than one specific poison.

That of late years, or at least since 1862, the cause of enteric fever in temperate climates has usually been attributed to the existence of putrescent or decomposing filth of an animal nature, is very patent from the published literature of the subject. The evidence thus available goes to show that whether the potential poison is generated in such a nidus *de novo*, as was believed by the late lamented Dr. Murchison or not, it is, in its beginnings—in its genesis—in some way or other intimately associated with the presence of animal matter or filth undergoing putrefactive metamorphosis. As it is probably with the cholera evacuations, so it may be with the excreta of enteric fever, the effective materies morbi, or germ, or poison—call it what we may—may not exist in a perfected and matured state, as maintained by the late Dr. Budd of Bristol, and others, in these at the time of their escape from the alimentary canal. But that in both instances the material exists in these dejecta out of which the effective poison can be reproduced under favouring conditions, it may be in conformity to the law of the "alternation of generations," is quite within the region of possibility, if not, indeed, of probability. At any rate, the phenomena of this fever are constantly being reproduced in identically the same form, attended by a characteristic train of symptoms, and accompanied by a series of pathognomonic lesions in all parts of the world, in the white as in the black races, but subject, during malarious seasons, in hot countries, to some modification, as has already been admitted in the foregoing observations, from the action of a single cause, with as much unerring certainty as is a potato or a turnip, placed in a congenial soil, under the needful conditions of heat, moisture, and light, from their respective seeds, or as is syphilis or small-pox from their respective poisons or germs. On such a hypothesis as this, the generation of the disease and its subsequent dissemination to the predisposed through infected air, water, milk, and other articles of aliment—it may sometimes be by means of foul clothing, bedding, or the ill-ventilated and neglected rooms, in which cases may have been accommodated—become intelligible.

When Dr. Ewart detected enteric fever among the prisoners of the Ajmeer gaol, the outbreak was attributed to the extremely insanitary condition of the prison itself. No word painting could exaggerate the abominable filthiness of the sleeping accommodation set apart for the convicts. They were arranged in groups of from fifteen to twenty in narrow low-roofed cells, and packed far too closely together. A few earthenware vessels were provided as urinals and commodes. In this way they were herded together from 8 P.M. to 6 A.M. daily. After the removal of the prisoners generally for outdoor labour on the roads the filth was taken away, but much of it was washed into shallow channels, leading to a neglected cesspool just outside the building, from which unspeakable odours emanated on the south-western aspect, or in such a situation as to allow the effluvia issuing therefrom to be wafted back into the interior of the gaol by the prevailing wind. The well from which the drinking water was drawn was not far distant, only a few yards. In addition to direct sources of contamination, which were self-evident, it was so near the cells, drains, and cesspools, that it must have been exposed to pollution by percolation through the intervening gravelly soil.

In those days, the pythogenic theory had not been propounded. Milk had not been regarded as a possible vehicle

for the conveyance of the poison into the human economy. But, in relation to this latter point, Dr. Ewart briefly narrated an incident which happened to him when civil surgeon of Ajmeer. A complaint having been submitted concerning the quality of the milk provided for the consumption of the prisoners; it was found that it had a most offensive taste and smell. His native doctor suggested that this arose from its being mixed with impure water. They visited the village from which the milk was supplied. Some fresh drawn milk was then mixed with water obtained from a neighbouring stagnant pool, which was used for ablution and bathing by men, women, and children, and around which were the evidences of fæcal pollution. The mixture thus procured corresponded in its offensiveness of taste and smell to that which had been objected to as unfit for use, and condemned. On urging these facts in the proper quarter, the contractor was changed, and no more milk adulterated with stinking water was supplied during the remainder of his residence at Ajmeer.

When, at this station, he met with cases of enteric fever among the population of the city. But confirmation of the diagnosis in fatal cases was not practicable owing to the objections of the natives to post-mortems. This unavoidable defect is all the more to be regretted, because, as has already been pointed out, it too often happens that in the very dark skin, the lenticular rose-coloured eruption coming out in successive crops, and in all their phases, disappearing on pressure, and quickly returning on the withdrawal of the same—such a valuable indication in the fair-skinned European—cannot always be distinguished. Here, again, there was no difficulty in discovering abundance of animal filth. In almost every house in the town there was a privy, and in many a cesspool in addition; the evil odours emanating therefrom in close, still, and warm weather tainted the atmosphere within; whilst the drains in the streets, receiving liquid sewage from overflowing privies and cesspools, polluted it without.

Dr. Ewart recorded similar experiences at Kherwarrah, among the Bheels of his regiment and the community; and at Calcutta, during his connexion with the Medical College and General Hospitals. The disease was most abundant in the autumn, then in the cold season, next in the hot weather, and least so during the monsoon. The modifying power of malaria was most apparent in the autumn and first half of the cold season, becoming less so in the middle and end of this, and scarcely perceptible in the remainder of the winter and during the hot months. Strangers of the dark and fair races below the age of thirty were most exposed to attack. It prevailed in the palaces of the rich and well-to-do, and in the huts and hovels of the poorer classes. It spared neither sex. His impression, derived from unremitting attention to this subject, was that enteric fever was domesticated in Calcutta.

Looking around for the reason of this, a little attention will show that the same insanitary conditions as are generally considered to lie at the foundation of the disease, in temperate regions, exist, to a very marked extent, in the metropolis of British India. After giving in detail a description of the utterly indescribable filthiness of the back slums of many parts of the European, and most parts of the native quarter; the difficulty does not consist in not finding plenty of animal filth to account for any amount of enteric fever; but in understanding how or why it is not still more prevalent than it is in such an unsavoury city. It is explained that "the reason why this form of fever is not more frequently met with amid such an abundance of fæcal matter in a state of putrescent fermentation, is probably to be discovered in the fact that fortunately most of it is not pent up in ill-ventilated sewers, but exposed daily to the powerful antiseptic influences of the atmosphere and sunlight in open drains, open privies and latrines, and in comparatively open cesspools. The impression which has been gaining ground of late years, that as the sewering of the town has been advanced, so has enteric fever been more frequently observed, lends countenance in support of this view. The augmented prevalence, however, may, in some measure, be owing simply to greater recognition of the fever, although it must not be forgotten that attention has been directed to the endemic existence of the disease during the past fifteen or twenty years."

As regards the assertion that such insanitary conditions are not to be found in military stations, barracks, and hospitals, Dr. Ewart is not satisfied with "the condition of the privies used by natives in the service of officers, and of the latrines employed by the numerous followers of native and British regiments. Even if the sanitary excellency of these is unimpeachable, there is still overwhelming evidence, in the reports of the Sanitary Commissioners, to prove that the neighbouring bazaars, frequented more especially by the younger soldiers, present, in unmitigated intensity, all the insanitary blemishes summarised in the foregoing narrative. It is here, it may be far away from their barracks, where they are not only liable to breathe air impregnated with emanations from decomposing animal filth, but to obtain food, milk, drink, and water of questionable quality and purity."

On a full review of the subject, there is nothing, in the occurrence of enteric fever in India, repugnant to the Murchisonian doctrine that, in its etiology, it is intimately connected with the presence of putrefying anima or fæcal filth. "The reason why the origin of the disease has not been more frequently traced to pythogenic causes is probably due to the stage of incubation having been too much excluded from consideration. The difficulty, especially in the case of those who dwell in clean and well cared-for barracks, is greatly magnified by the period of latency or incubation. This varies from seven or ten to fourteen or twenty days. So that to trace the origin of any case, the investigation must be of a much more searching and comprehensive character than any which has hitherto been conducted in India. It is manifest that the alleged freedom of the barracks and their immediate surroundings from filth is, in itself, scarcely sufficient. The inquiry should embrace a calm and impartial review of the patient's history and habits, derived first from himself, and secondly corrected by the collateral evidence of his friends, extending over a period of many days antecedent to the attack. As the disease is rarely spread by direct contagion, in the well-ventilated military hospitals in India, it follows that, in almost every isolated case or series of cases, a similar exhaustive investigation would have to be undertaken if the source of it, in all cases, is to be identified to the utmost extent attainable."

Dr. Ewart does not believe that the enteric fever lately prevailing in the "Madras Command" has been merely "malarial or climaterial fever of the continued or remittent type with intestinal complication." Even should the results of future investigation go against the filth theory of its origin, this conclusion, however well grounded, would not suffice to justify us, with the evidence of so many independent clinical observers proving the contrary, in disputing the domesticated existence of the fever in India. It would rather have the effect of causing inquiry on some other line or lines with a view to discover the habitat and nature of the cause not only in that country, but in Europe and America." Whatever views may be held concerning the cause, so long as the thing—enteric fever—is present in India, it will, now that so much attention has been attached to it, continue to be more and more generally recognised as a distinct entity, generated and diffused independently of malaria, though, like many other affections, being liable to be modified by it, perfectly irrespective of the views that may, from time to time, prevail about its precise etiology.

Rebiews and Notices of Books.

The Spectroscope in Medicine. By CHARLES A. MACMUNN, B.A., M.D. Univ. Dub. With Chromo-lithographic Plates and other illustrations. London: J. & A. Churchill. 1880.

A WORK of this kind has long been called for. The progress of pathological and physiological research by means of the spectroscope has not attained its due development from the want of a simple treatise clearly defining the methods of investigation and their application to this branch of medical study. Already, however, the spectroscope has done good service in physiology by correcting many erroneous ideas regarding various animal pigments, and also by explaining the difference in colour between arterial and venous blood, and showing wherein the oxygen-holding power of the red corpuscle resides. In forensic medicine the spectroscope, too, renders invaluable aid in affording the

only reliable means for detecting the presence of blood when present in almost unappreciable quantities. The presence of poisonous metals, again, such as arsenic, antimony, mercury, copper, lead, &c., can readily be demonstrated by means of their respective spectra. The practical application of the spectroscope in clinical medicine is still, however, extremely limited. Nor can much advance be expected in this direction till clinical observers are made familiar with the practical working of the instrument. Dr. MacMunn's work appears to us admirably suited for this purpose. It is simple in style, lucid in exposition, and modest in tone. The first two chapters are devoted to a consideration of the various kinds of spectra, with a description of instruments and methods for using them. Chapter 3 deals with the application of the study of bright line spectra to medicine, particularly drawing attention to the late Dr. Bence Jones's researches in determining the time that salts take to reach various tissues and organs. Chapters 4, 5, and 6 treat of the absorption spectra of blood, and give easy methods of preparing most of the important spectra which have been hitherto described. Speaking of a simple process, by which the important spectra of hæmatin and cruentin can be procured, Dr. MacMunn states, that it was not till after he had studied Dr. Thudichum's method that he was able to procure the various decomposition products of hæmoglobin by simple and rapid means. Dr. MacMunn thinks that this gentleman's method ought to be more generally known, and takes this opportunity of observing, "that he has not been sufficiently thanked by the members of his own profession for the great and valuable additions to our knowledge of physiological and pathological chemistry which he has made." As we have lately been in conflict with Dr. Thudichum with respect to another matter, we have pleasure in giving prominence to this just tribute with regard to the value of his scientific researches. Chapter 7 gives an account of the absorption spectra of bile, urine, &c. Reference is made to the pathological importance of Jaffé's isolation of the pigment, which gives an absorption band at F, for this pigment appears to be identical with the uro-bilin, which Dr. MacMunn has found in every specimen of healthy human urine. With regard to urine, there is only one pigment which gives a well-marked absorption band, and this is the pigment just named (uro-bilin). Dr. MacMunn remarks that this is the pigment which ought to have the greatest attention paid it by clinical observers, for, although constantly present in healthy human urine, it is sometimes absent in disease, though in what diseases it is absent he is at present unable to say. Another bile pigment, according to the author, besides uro-bilin, which does not, however, give the characteristic colouration with Gmelin's test, occasionally appears in certain morbid conditions of the urine. It was found to occur in the following specimens of urine:—1. Taken from cases of rheumatic fever. 2. Pregnancy (sixth month). 3. Thoracic aneurism accompanied with albuminuria. 4. Cirrhosis of the liver. 5. Cancer of the pylorus. As a second absorption band has never been obtained in some hundreds of specimens of urine from patients suffering from trifling ailments, Dr. MacMunn infers that it only appears in those cases where there is undoubted disease of a severe character.

OUR LIBRARY TABLE.

Report by Dr. Milne Robertson upon Certain Peculiar Habits and Customs of the Aborigines of Western Australia. By Dr. A. MILNE ROBERTSON, Surgeon, Convict Establishment, Western Australia.—This brief report has been prepared "for the information of gentlemen of the medical and other scientific professions," and to accompany the collection of weapons, implements, &c. sent to the exhibition at Sydney, N.S.W., 1879. It relates to the practice of circumcision at the age of puberty, and also to slitting the urethra, also at puberty, among certain families of the aborigines of Western Australia. The two practices are not found to exist together in the same group of families, and the families slitting the urethra differ as to the extent to which the slit is carried. Dr. Robertson's account is full of interest to the anthropologist.

A Brief Account of the Natives of Western Australia, their Character, Manners, and Customs. Prepared under instructions from H.E. Major-General Sir N. H. GEORGE ORD, K.C.M.G., C.B., Governor of the Colony.—An excellent summary account, written to illustrate the collection of weapons, implements, &c. sent to the exhibition at Sydney, New South Wales.

A Systematic Course of Practical Qualitative Analysis. By THOS. ELTOFT, P.C.S., P.I.C. London: Simpkin, Marshall, and Co. 1879.—We fail to perceive any real advantage possessed by this little book beyond that of being printed in strong clear type. There are already too many small text-books of the kind.

INSTRUMENT FOR ILLUMINATING THE EYE.

To the Editor of THE LANCET.

SIR,—A common difficulty in ophthalmic surgery is met by the suggestion made by Mr. James E. Adams in his remarks on "an instrument for illuminating and magnifying the anterior parts of the eyeball." A small black foreign body on the cornea near its centre, especially if the iris is dark-coloured, is absolutely invisible to the naked eye, even in a good light; but with the aid of a convex lens and focal illumination, by means of a second lens, is easily discovered. When discovered, however, its removal is extremely difficult without skilled assistance. Mr. Adams's instrument overcomes this difficulty, though I venture to think that the use of a pair of spectacles (with biconvex glasses of, say, ten-inch focal length) worn by the surgeon is a simpler and better way of obtaining the magnified image, and obviates certain disadvantages attending Mr. Adams's method. The lens fixed to the patient's head must have a more or less limited range of motion, whereas the observer, with a pair of spectacles on his nose, can alter the line of observation to any required angle. The fixed lens, too, may puzzle the observer by the reflected image of the surrounding objects if not set carefully, and this is not the case with the use of the spectacles. If therefore Mr. Adams's apparatus is employed, I would suggest that the lens for magnifying the image should be dispensed with altogether, and the spectacles be used by the operator. The focal illumination may also be dispensed with in good daylight, and even in the absence of daylight the benzine lamp supplied by Messrs. Krohne and Sesemann answers every purpose in the majority of cases. There will, however, still be exceptional occasions in which Mr. Adams's instrument, with the modifications of form that I suggest, would be a valuable addition to our resources. The use of spectacles is not necessary for myopic surgeons, but for the emmetropic, hypermetropic, or presbyopic will be found of great value, and, when once tried, will not be easily laid aside for the merely fanciful objection that their use is, perhaps, regarded by the patient as a confession of inefficiency. The successful issue of an operation will easily reconcile the patient to any such imaginary defect in the operator.

Even focal illumination and a magnified image sometimes fail to give the information required in the search for a foreign body. The illumination of the pupil by the ophthalmoscope is then the most efficient method; and when the two methods are resorted to any doubts as to the depth of the foreign body, as to its having penetrated deeply into the cornea, as to its having passed into the anterior chamber, and whether it has penetrated or wounded the lens, will be much more satisfactorily solved than if one method only has been resorted to. The same reasoning will apply to traumatic lesions, or the result of disease in the same regions without the presence of a foreign body.

I am, Sir, yours, &c.,

Feb. 6th, 1880. W. SPENCER WATSON, F.R.C.S.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 21, 1880.

THE Premier's reply to the Marquis of LOTHIAN'S question on the subject of Dr. FARR and the Registrar-Generalship may be considered satisfactory only inasmuch as it averred that it was originally the wish of the Government to appoint Dr. FARR to the vacant post, and that it was only on the ground of his failing health that this intention of the Government was not carried into effect. The admission or assertion that, but for certain representations made as to the state of Dr. FARR'S health, he would have been appointed to succeed Major GRAHAM, is in some sense an acknowledgment of the justice of the expectations entertained by the public and the profession, that Dr. FARR had earned a right to be the new Registrar-General. It would serve no useful purpose now to inquire who made those representations as to the state of Dr. FARR'S health, which caused the Premier to shrink from the responsibility of appointing him to the vacant post which Dr. FARR considered himself capable of holding for a short period. It is, however, necessary to protest against the convenient ambiguity of one part of Lord BEACONSFIELD'S statement on the subject, which has led one or two contemporaries to misunderstand the true bearing of some of the facts of the case. It has been inferred from Lord BEACONSFIELD'S remarks, which certainly suggested such an inference, that the official document asking for the superannuation of Dr. FARR was received at the time when inquiries were being made with reference to the proposed appointment of that gentleman to the post about to become vacant. It is easy to comprehend how acceptable to the Government would have been an application for superannuation from Dr. FARR at the time the Premier was weighing his claims against those of Sir BRYDGES HENNIKER, the brother-in-law of a member of the Cabinet, although not honoured with the personal acquaintance of the Premier. Unfortunately, however, facts and dates are against the presumption as to the time of the receipt of Dr. FARR'S application to retire on superannuation. It is now simply a matter of history that Dr. FARR did not ask to retire until the Premier had, without any expression of regret to Dr. FARR, ignored his request for promotion, and had appointed Sir BRYDGES HENNIKER. We will refrain from raising the question whether the Premier or Dr. FARR is most competent to form a sound opinion whether the health of the latter would have allowed him to perform the duties of Registrar-General, but it is somewhat amusing to hear of the arduous duties of the post, assisted as the Registrar-General is by a large and efficient staff of permanent officials at the central office, very many of whom have been trained, and have served under the late Registrar-General and Dr. FARR for more than a quarter of a century. However, the appointment is filled, and Dr. FARR has applied for superannuation. It now only remains to inquire what the Government intends to do to mark the signal services of Dr. FARR to public health and sanitary statistics, and their regret that circumstances prevented them carrying out their intention to appoint him Registrar-General in succession to Major GRAHAM. Lord BEACONSFIELD cannot be said to have been lavish in his acknowledgment of the value of Dr. FARR'S services, but if he meant half he said in that direction, it might have been thought that he would have hastened to remove the impression that Dr. FARR had been slighted, and to place it beyond doubt that his services are fully recognised by the present Government. It is undoubtedly a fact that Dr. FARR'S labours in office have been recognised and estimated at their true value by the public; but it is equally true that they have never been adequately rewarded by the State. On Monday next Dr. LYON PLAYFAIR will ask a question in the House of Commons, having for its object to ascertain the intention of the Government with regard to some public recognition of Dr. FARR'S services. The interest of the profession and the public in this matter is not likely to lessen by unreasonable delay in its settlement.

IT is satisfactory to find that Mr. Secretary CROSS perceives the need of medical knowledge as a qualification for the office of Coroner. We do not understand him to have declared distinctly in favour of medical coroners, but to have conceded that the function to be performed is medical, which substantially amounts to the same thing. This position, if it be assumed ministerially and resolutely maintained in Parliament, may enable the Government to pass a measure of reform satisfactory alike to the profession and the public. It is clearly indispensable that some provision should be made whereby such knowledge as only a fully educated medical man can possibly possess should be instantly brought to bear upon cases of mysterious or unexplained death. We are disposed to admit that special skill and legal training may be requisite to enable a coroner to hold his court and charge his jury. Now and again it certainly happens that the proceedings extend over so wide an area, and the evidence adduced is so voluminous and complicated, that a trained and judicial mind must needs hold the balance if justice is to be done. Nevertheless, it should not be forgotten that an "inquest" is purely and simply a search for the "cause of death." Unless this be kept steadily in view, it will scarcely be possible to avoid going astray.

The proposal made and consistently advocated in these columns seems to us, on the whole, the most practical, and generally desirable, of the schemes of reform propounded. It is briefly this—to require from the medical officers of health, who at present form a medical corps of the highest value and capable of further development, a special knowledge of State medicine, legal medicine, and lunacy; and, relieving these gentlemen wholly from private practice, to make them the guardians of local health, to entrust them with the duty of examining alleged lunatics, and to constitute them the medical assessors or "coroners," charged to search for the cause of death in all cases where the certificate of a private medical practitioner is not forthcoming. We have further proposed that these officers, while generally acting as at present, locally and independently, shall, upon the summons of a Judge of Assize, assemble to form a *jury of experts* in

cases of special difficulty, or involving questions of life and death raised on medical issues.

We doubt whether this broad scheme has been adequately considered by the Government. It certainly seems to us to offer an effective solution of a daily growing difficulty. There would be no need to alter the mode of appointment or to interfere with the local work of these officials. The only change necessary would be to require from candidates, offering themselves for vacancies occurring after the passing of the new Act, proof of having bestowed special attention on the three subjects indicated—namely, sanitation and public health, legal medicine with toxicology, and so much of mental medicine as would enable a man to recognise the presence of insanity, and to watch the progress of a case at those periodic visits to the asylum which would be requisite to keep a patient certified insane under *personal* observation for, say, eighteen months.

No one need be under any apprehension as to the difficulty of obtaining the services of well-qualified candidates. Let it be once understood at the schools that the appointment of "officer of health" is to be made permanent and charged with these responsible public duties, and students will prepare, teachers train their pupils, and examiners gladly apply suitable tests of proficiency, so that within two or three years from the passing of such an Act as we have suggested, the applicants for local appointments will be men well up to their work. The chief change required would be a provision requiring the police or any other authority receiving information of an unexplained death to send at once to the local "officer of health," who, with the aid of his inspectors, would at once proceed to search out the "cause," adopting all necessary measures to that end. The report drawn up by this official might be returnable to the local justices, stipendiary magistrates, or to a coroner. In a case of lunacy the friends would send direct to the medical officer, or, if the patient were a pauper, the relieving officer would, as now, be the channel of communication.

We commend the matter to the serious consideration of the Secretary of State, in the full conviction that it offers the outline of a scheme at once practicable and likely to be effective.

THE frequent references to the famine of 1846–47 during the recent discussions on the existing distress in Ireland in both Houses of Parliament is ominous of an impending evil which even to the present may have been imperfectly apprehended. Of course it is eminently desirable, and indeed necessary, that the economic lessons to be derived from that unhappy period, particularly those of a pecuniary and, as ordinarily understood, social nature, should be turned to proper account when the nation is again called upon to stretch out its hand, with widely open palm, to the help of the sister island. But it is to be wished that some indication had been given, notwithstanding the immediate and pressing necessity of first finding food for the famished, that the health economics of the existing distress had not been lost sight of, particularly if we are to have recourse to the experiences of 1846–47 for guidance. And it must be said that some reason has been given to suspect a want of foresight on the part of the Government in this direction. In both Houses of Parliament, ministers, speaking of the distressed districts, have used the unfortunate phrase that there have not been as yet any deaths from "starvation." Long before fatal starvation occurred, there would be a state of health, arising from chronic starvation among the destitute population, pregnant with future evils, and demanding the most earnest attention of the responsible authorities. But the phrase, although used perhaps as a mere convenient form of expression at the moment, recalls so vividly the use of the like phrase by the Government of India during the earlier period of the late famine in Southern and Western India, as to cause a shudder. We know how that Government persisted in using this phrase when the famine-stricken populations were dying by hundreds of sheer starvation. We also know how it was used by them to veneer a policy of relief unparalleled in history, and of which the source appears to have been sought in the pages of "Joe Miller," where a story is told of a man who endeavoured to train his horse to live on a straw a day, but when he was about to achieve his end unfortunately the horse died. Happily there is no dread here of the destitute population in Ireland being made the subjects of hideous experiment as to how far a semblance of life can be maintained, irrespective of other considerations, as was lately the case with the destitute populations of Southern India. But the use of the phrase referred to by responsible ministers, after the Indian experience, may reasonably beget a doubt whether they are as sensitive as might be to the health-economics of the distress now existing in Ireland.

What were the lessons of the stupendous misery in 1846–47 in this matter? In the track of the famine there quickly followed fever—especially typhus and relapsing,—scurvy, and dysentery. And the two fevers named presently overran the famine districts, and, accompanied by scurvy and dysentery, penetrated, with the fugitives from them, into the great towns of England and Scotland, and the chief seaport towns of the United States and Canada. In each of these places were repeated among the fugitives the horrors which marked the prevalence of the several diseases in Ireland, while, in addition, the local populations, becoming infected, were involved in the miseries arising from the dissemination of typhus and relapsing fever. This question, then, of "fever" in the districts now suffering from famine is not simply a local one. It touches the health interests of every community which may be brought into communication with them. The typhus of 1846–47, and probably also relapsing fever, were no new growths in the famine-stricken districts. Both diseases, relics of former miseries, appear to have been present there before the famine, and they grew with the growth of the famine until they exceeded all means that could be devised for their restraint. There is scarcely a more painful picture presented in the histories of the famine of 1846–47 than the utter inadequacy of the measures which could be put in force with a view of ameliorating the evils arising from the spread of typhus and relapsing fever; and it is obvious that they were adopted *too late* to give reasonable hope of even partial success. Ireland stands in a very different position now, in respect to public health matters, than she did in 1846–47. The chronic state of destitution existing in the districts affected by famine in those years far exceeded that which exists in the districts

now affected. Typhus was endemic among the famine-stricken populations, but this does not seem to be the case now. There was then no sanitary organisation worthy of the name, while at present a sanitary organisation with large powers exists throughout the country. The means, in fact, exist by which not only the medical and sanitary aspects of the existing famine may be carefully watched, and measures for dealing with such of them as should be provided for beforehand devised, but also for carrying into effect what may be required. Whilst the first care must be given to staving off starvation, the not less fatal morbid consequences apt to follow upon and accompany destitution must not be lost sight of, and should as far as possible be cared for in advance. And there are significant warnings that forethought in this latter respect is incumbent upon the Government. There have been scattered cases of typhus in England; and although we have little definite information as to typhus in Ireland, and especially in the districts where the distress prevails, an uncomfortable feeling is gaining ground that these scattered cases are derived from Ireland—are drops, indeed, of a shower of which the full flood may fall upon the populations where there is the distress. And it is to be remembered that when in 1846-47 famine and typhus coexisted in Ireland, they coexisted in several parts of the continent of Europe also, just as at the present time these evils are understood to coexist in several parts of Russia.

In dealing with the famine now existing in Ireland efforts should be made not only to obviate the results as manifested in actual privation of food, but also the results which may be manifested in diseases apt to arise from such privation, and which are prone to accompany it.

AMONGST the many researches that have been made in regard to the phenomena presented during the coagulation of the blood, comparatively few have been devoted to the precise determination of the time at which it occurs after removal from the vessels. THAKRAH, in his well-known work, estimates it at from five to ten minutes for the horse, two to ten minutes for the ox, one minute to one minute and a half for the sheep, half a minute to one minute for the bird, one minute to three minutes for the fish, and two to four minutes for the frog. NASSE found the order of rapidity of coagulation in domestic animals to be the horse, goat, dog, ox, pig, sheep, and rabbit; but K. SCHOENLEIN has recently shown, in an article contained in the *Zeitschrift für Biologie*, that many circumstances render these statements unreliable. No distinction was drawn between the first appearance of coagulation and the solidification of the entire mass. No control experiments were made with other and similar quantities of the blood, and many precautions were neglected which experience has shown are requisite that the time of the coagulation should be rightly estimated. He has himself adopted a plan originally suggested by VIERORDT, which consists in pricking the finger, and dipping into the drop of blood which escapes a capillary glass tube with thin walls, having a diameter of about one millimetre and a length of about half an inch. Into the other end of the tube, which is open at both ends, is inserted a white horsehair, thoroughly purified and cleansed by boiling in alcohol and ether. At first it will be found that on withdrawing the hair for a short distance no blood adheres to it, but as soon as coagulation has commenced, small red coagulated portions of blood adhere to it, and can be removed with it from the tube. The coagula are very often thicker than the lumen of the tube, and thus show that they adhere very firmly to the hair—much more firmly, indeed, than to a glass tube. A small quantity of uncoagulated blood usually remains in the tube, which, even if it be churned with the hair, refuses to solidify. In some salamanders and tritons the process of coagulation takes place with so much energy that serum is almost immediately squeezed out of the newly-formed clot. In most of the lower animals SCHOENLEIN snipped a small piece of skin from the back after the hair had been removed by shaving; but in frogs the heart was excised and the blood obtained from it; and in fishes the gills were used as the source of supply; whilst in birds a feather was pulled out. By practice he was able to obtain the blood in the glass tube with the horsehair inserted in the course of from ten to fifteen seconds, and the time was always taken from the moment when the blood escaped from the bloodvessels.

The valuable part of SCHOENLEIN'S paper is a series of tables in which he notes the name of the animal from which the blood was taken, its sex, and weight, the temperature of the air at the time of the observation, and approximative numbers in seconds of the time of commencement and termination of the act of coagulation. We extract some of the results at which he has arrived. In the barbel (Barbus fluviatilis) in one instance coagulation began in the blood in 185 seconds after it had escaped, and was completed at the expiration of 205 seconds, the whole period occupied being twenty seconds. In other instances the time of commencement was 125 and 95 seconds, and the duration of the act was 20 and 50 seconds. In the Triton cristatus the commencement of coagulation varied from 55 to 265 seconds after withdrawal, but in the former case it was completed in 20 seconds, and in the latter in 30 seconds. One of the slowest kinds of blood to coagulate was that of the Anguis fragilis, or blind worm, which did not begin to coagulate till after the lapse of 585 seconds, or nearly ten minutes, but even this was exceeded by a specimen from the Coluber natrix, or ordinary snake, which began to coagulate only after 1295 seconds, or more than twenty minutes, and was 410 seconds in becoming solid. This animal was, however, pregnant. A long list of birds is given, including the sparrow, starling, crow, woodpecker, pigeon, crane, swan, and others. In these the period of commencement of coagulation varied considerably, even for the same species—namely, from 75 to 495 seconds; in a large number the coagulation was completed in from 50 to 90 seconds, but in a few it lasted two minutes or more. In the mouse and rat the beginning varied from 85 to 245 seconds, and it was completed in from 50 to 180 seconds. Guinea-pigs presented similar variations. Ox blood varied from 37 to 555 seconds in beginning to coagulate, and from 90 to 210 seconds in complete coagulation. In man the commencement of coagulation varied from 145 seconds after withdrawal from the vessels, to 515 seconds, and the completion occurred at times varying from 3 to 10½ minutes. It will thus be seen that very remarkable differences are observable in the time of coagulation of the blood in different animals, the limits of

variation differing frequently 10 to 20 per cent. for the commencement of coagulation, as well as for its termination, and in some instances very much more.

IT would seem that the various examining bodies in England are not over sanguine as to the rapid adoption of a Conjoint Scheme. A few weeks ago we referred to the changes which had either been suggested or carried into effect at the University of London and the Royal College of Surgeons. The Royal College of Physicians is now moving in the matter, and a new set of by-laws for the College licence was discussed and formally adopted at a meeting of the Fellows on the 16th inst. These regulations will make so many alterations in the conditions for this qualification that we must refer to them at some length. The most important change is one which we have long advocated, and which has our heartiest approval. Instead of two examinations, three are now introduced, and a complete rearrangement of the subjects is thereby necessitated. The *First Examination* is open to all candidates who have been registered as medical students by the General Medical Council, so that it may be passed at the earliest opportunity, that is, as soon after the student has joined a recognised medical school as he may think fit to present himself, or even whilst he is a pupil of a legally qualified practitioner or attending at a country hospital or infirmary. The subjects of this examination are Chemistry and Chemical Physics; Materia Medica, Medical Botany, and Pharmacy; and Osteology; and schedules will be drawn up indicating the range and extent of the knowledge that will be expected. Every pupil, therefore, who chooses to spend a certain time in the country before entering at a medical school, will have a great inducement to work at subjects which he can readily learn, and will be so far the better prepared for the earnest study of the more advanced and difficult parts of his curriculum. The certificates which are compulsory at this stage will merely state that he has received instruction in Chemistry and Chemical Physics, Practical Chemistry, Materia Medica, Botany, and Practical Pharmacy. The wording "received instruction" is very vague, and we venture to think that such certificates might have been dispensed with altogether. However, as it does not compel attendance on courses of lectures in subjects which the student can readily learn by private tuition, or even in some instances teach himself, if he sets about doing so with a good text-book and the necessary practical material, we must congratulate the College on being the first examining body which has really recorded its protest against the unnecessary number of lectures which the medical student is compelled to listen to. Those who benefit by lectures may attend them; those who can learn these preliminary subjects without so doing will be at liberty to dispense with them. Botany and Materia Medica can, as a rule, be much more thoroughly mastered in the country than by attendance on a routine course of lectures. The *Second Examination* includes Anatomy and Physiology, and the range of subjects in the latter science is also scheduled. Candidates for this examination must have passed eighteen months at a recognised school, and must furnish certificates of attendance on a course of Anatomy, Physiology, and Practical Physiology (which is thus definitely separated from the ordinary theoretical lectures), and of having performed dissections for not less than twelve months. The *Third Examination* cannot be entered for until the expiration of two years after the passing of the Second, and embraces Medicine, Surgery, and Midwifery especially, whilst questions on Therapeutics, Forensic Medicine, and Public Health will be included. Besides attendance on lectures, certificates will have to be produced by candidates of having undergone systematic practical instruction in Medicine, Surgery, and Obstetric Medicine, and the character and extent of such systematic instruction is explicitly laid down. In insisting on this practical instruction the College is well advised, and we are sure that a great reform in bedside teaching at most schools must inevitably follow this regulation. The candidate must also have discharged the duties of a medical clinical clerk during six months, and of a surgical dresser during other six months. The regulations, therefore, whilst sufficiently elastic in the early stages of the medical curriculum, are very stringent in the later and absolutely essential portions, and we agree with the authorities of the College in preferring this plan of education to any other which has been submitted to the profession. A further boon to the student is the exemption from re-examination in subjects in which he has passed at other examining boards, and in this respect also the College of Physicians has shown as much liberality as could reasonably be expected. A large number of candidates will be sure to present themselves for the licence as soon as the new by-laws have been circulated and clearly understood in our medical schools and by the profession generally, and a qualification, which is now too little appreciated when we consider its value and meaning, will soon attain the prominence and public favour which it so eminently deserves.

AT the competitive examination for the Army, Navy, and Indian Medical Services, held at Burlington House, fifty-three candidates came forward for the Indian Service, forty-two for the Army, and five for the Navy. This may be taken as a fair estimate of the opinion of the profession as to the relative advantages of the three services. The Indian still holds its ground as the most popular; the Army seems to have regained its position by the new Warrant, and, if we consider that it is only two months since seventy-two candidates were passed into it, we think that the number entered at the present examination is a satisfactory testimony to the prospects offered by the new conditions of service. But what shall we say of the Navy? It has been able to obtain only five candidates! and we regret that even this small number have been induced to offer their services before their new Warrant has been published. This result, however, cannot fail to show the Lords of the Admiralty that, until the Department is put upon a satisfactory footing, candidates will not be forthcoming in anything like adequate numbers. And this will react unfavourably upon the navy in general; sailors will not be content to enter a service in which, in the event of sickness, injury, or wounds in action, there will be either no medical officer at hand to care for them, or, if at hand, he will be of a very inferior stamp. We feel assured that, until justice is done to the Department, each returning half year will show a

still further reduction in the already scanty number of candidates, until at length no qualified man will be found forthcoming. As the Admiralty must take the matter soon into their consideration, we would remind Mr. W. H. SMITH that, while the pay and retirement must be increased, even that will not secure good men, unless there is also a distinct understanding that in what may be termed social questions—as choice of cabins, for instance—definite rules shall be laid down and enforced, instead of it being, as at present, in the power of commanding officers to render the orders of the Lords of the Admiralty a dead letter.

Annotations.

"Ne quid nimis."

THE RISING SMALL-POX MORTALITY.

IT is very unsatisfactory to see that we are again threatened with a small-pox epidemic. It has been known for a few weeks to medical officers of health that this horrible disease—which nobody need have—was asserting itself. The reports of the Metropolitan Asylum Hospitals are unmistakable in their significance. The number of deaths in London the week before last was greater than in any week since the beginning of July, 1879. And the number of small-pox patients in the Metropolitan Asylum Hospitals was, on the 7th of February, 91, as against 80 and 84 in the two preceding weeks; and the admissions of new cases 36, against 8, 21, and 22 in the three previous weeks. Is it not possible for the various parishes and sanitary authorities immediately to meet and consider whether all is being done that can be done in arrest of the development of this epidemic? It may not yet be too late—though it certainly soon will be—to prevent a great outbreak of the disease. Islington, which has much to answer for in regard to the last epidemic, does not appear to great advantage in regard to this. At a meeting of the Islington guardians, a letter was read from the Asylums Board, complaining that from this parish five unvaccinated children had been admitted into hospital suffering from small-pox. Other parishes too, we believe, have to complain of importations of small-pox from this district of London. It will be lamentable indeed if the Local Government Board and the local authorities together do not make some special efforts promptly to isolate cases, and to vaccinate or revaccinate exposed persons. With so many other claims for accommodation in the Metropolitan Asylum Hospitals, the embarrassment may be very great if efficient means in this direction are not speedily used.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

A MEETING of the Fellows convened by requisition was held last Saturday, to deliberate and consult about the election of a representative of the College in the General Medical Council, as to whether it was vested in the Council of the College or in the Fellows. Mr. Jacob, who made the opening statement, contended that although the representative in the Medical Council had been elected by the Council for the past twenty years, yet the appointment lay with the Fellows at large, and gave various extracts from the charters to prove that the corporate body of the College consisted of the Fellows, and that elective rights were vested in them. It was, he stated, solely in view of the probable reconstruction of the Medical Council under the Bill now before Parliament that he brought the matter forward. Mr. Jacob concluded by moving a resolution, which was seconded by Mr. Robert McDonnell, that in the opinion of the College it was desirable that any doubt which might exist respecting the right of election of the representative of the College in the General Medical Council should be removed, and that the Council be recommended to take legal advice as to the rights of the Fellows in such election. The resolution was carried, sixteen voting for it and eleven against, but it may be added that many of its opponents had left the room some time previously. The matter will be brought under the notice of the Council this week, and the result will duly be made known and reported to the College, but it appears improbable that they will consent to the step proposed.

DEATHS OF ARMY MEDICAL OFFICERS.

WE regret to record this week the deaths of two more officers of the Army Medical Department, Surgeon-Major Augustus Robinson Hall, and Surgeon William Lysaght McCarthy. Mr. Hall entered the service in April, 1861, and was shortly after gazetted assistant-surgeon to the 52nd Light Infantry, with which regiment he served several years in India; he was subsequently appointed to the Royal Artillery, and was for some years in medical charge of a battery of the 16th Brigade in various stations in the Bengal Presidency. On his return to England he was stationed for some time at Woolwich, but volunteered again for India in 1876, and was appointed to a battery of artillery at Morar. On the commencement of the Afghan hostilities Mr. Hall was ordered to join the Division under Sir Donald Stewart, which force he accompanied to Kandahar, and where he remained till compelled by ill-health, brought on by exposure and climate, to appear before a medical board, who invalided him to England; he did not, however, live to reach home, but was landed at Malta in a critical condition, and died shortly afterwards from chronic dysentery. Mr. Hall was the author of numerous papers in THE LANCET, *Indian Medical Gazette*, and other journals, on cholera and tropical diseases. Cholera he had made his special study, and its treatment by the hypodermic injection of chloral and other sedatives may be said to have been first brought into general notice by him. Mr. Hall was a widower, but he leaves two orphan children to mourn his loss.

Surgeon W. L. McCarthy obtained his commission in the medical service of the army in August, 1877, and died at Jamaica on the 1st of January last, after a short illness.

THE POWER OF "GOOD SPIRITS."

ON a recent occasion we remarked on the disastrous effects of "depression" of the physico-mental being—as a whole—and showed how it left the organism exposed to the onslaught of disease. The corollary of that line of reflections is one to which it is equally worth while to direct attention—namely, the power of "good spirits." With the aid, or under the influence of "pluck," using that term in a modern sense and in relation to the daily heroism of life in the midst of difficulties, it is possible not only to surmount what appear to be insuperable obstructions, but to defy and repel the enmities of climate, adverse circumstance, and even disease. Many a life has been saved by the moral courage of a sufferer. It is not alone in bearing the pain of operations, or the misery of confinement in a sick room, this self-help becomes of vital moment; but in the monotonous tracking of a weary path, and the vigorous discharge of ordinary duty. How many a victim of incurable disease has lived on through years of suffering, patiently and resolutely, hoping against hope, or, what is better, living down despair, until the virulence of a threatening malady has died out, and it has ceased to be destructive, although its physical

characteristics remained? This power of "good spirits" is a matter of high moment to the sick and weakly. To the former it may mean the ability to survive, to the latter the possibility of outliving, or living in spite of, a disease. It is therefore of the greatest importance to cultivate the highest and most buoyant frame of mind which the conditions will admit. The same *energy* which takes the form of mental activity is vital to the work of the organism. Mental influences affect the system, and a joyous spirit not only relieves pain, but increases the momentum of life in the body. The victims of disease do not commonly sufficiently appreciate the value and use of "good spirits." They too often settle down in despair when a professional judgment determines the existence of some latent or chronic malady. The fact that it is probable they will die of a particular disease casts so deep a gloom over their prospect that through fear of death they are all their lifetime subject to bondage. The multitude of healthy persons who wear out their strength by exhausting journeys and perpetual anxieties for health is very great, and the policy in which they indulge is exceedingly shortsighted. Most of the sorrowful and worried cripples who drag out miserable lives in this way would be less wretched and live longer if they were more hopeful. It is useless to expect that any one can be reasoned into a lighter frame of mind, but it is desirable that all should be taught to understand the sustaining, and often even curative, power of "good spirits."

DIPHTHERIA IN RUSSIA.

THE *Kiev Gazette* states that there are localities in that city in which all the children under ten years of age had been carried off by diphtheria; the general mortality from the disease throughout the city has been 50 per cent. of the attacked. M. Kapoustine, in a communication to the Sanitary Committee of St. Petersburg, calls attention to the fact (as he describes it) of the appearance of diphtheria in a locality being nearly always preceded by disease among cattle, and he suggests that all milk should be boiled before being consumed. Professor Bystrow has prepared for the Central Committee of the Red Cross Society a report on the prevalence of diphtheria in the Government of Poltava. It would appear that the disease first appeared in an epidemic form in this government three years ago. During the first twelve months of the outbreak it attacked 29,765 persons and killed 12,052 (40 per cent.). Since this period the epidemic has continued without any abatement, and the mortality has steadily increased, reaching 60 per cent. of the seized, and in some instances even 85 per cent. Any attempts to struggle successfully against the further spread of the malady must, according to the Professor, be made simultaneously over the whole area of its prevalence. He suggests that circulars giving a description of the disease and of the measures to be taken when it first shows itself in a district, should be prepared and issued to the local authorities. In preparing such a circular he points out that it is especially necessary that the measures advised should be simple, not costly, and such as peasants could carry out. The syndic and priest of the locality should be provided with chlorate of potash for gargles and local applications. A good cottage should be set apart for the treatment of sick children, who should be put under the charge of sisters of charity, aided, if thought fit, in nursing by the mothers, and in the domestic duties of the establishment by childless widows, who should be remunerated for their services. Except the mothers, no persons to be allowed to visit the sick children. The name of hospital should not be attached to the cottage, and autopsies ought to be strictly forbidden. "Science must reserve its work for towns where more enlightened populations are met with. A single autopsy would alienate the confidence of a village for ever." Provision must be made for the gratuitous care of the poorest of the sick children; burials should be performed without previous exposure of the corpses in the church; the priest and his assistants should protect their hands and hair with some preparation of carbolic acid; the clothing of the dead should either be burnt or disinfected with sulphur; and all cottages should be aired daily. Lastly, Professor Bystrow utters a caution to medical men against the performance of laryngotomy, without having first obtained the consent of the parents or guardians.

"BRUTAL SPECTACLES."

THE sports which enlivened the leisure and stirred the sympathies of our grandsires, such as cockfighting, bull-baiting, pugilistic encounters, and the like, have either died out of interest or been repressed, in obedience to the growing intellectuality of the age. There is no need to qualify the admission involved in this last remark. There may be, and probably is, a minimum of intense culture and the highest class of brain-work, as a result of the mental activity which characterises the period in which we live, but it must be conceded that never in the history of England, and probably never in the history of the world, has there been so much general enlightenment as now. There have been times when the light of knowledge has been incomparably more lustrous, but never before has it been so widely and equally diffused. Looking to the fact that we are a self-governing people, it must be obvious that, however the change may have been produced, the abandonment of the coarser forms of sport is to be regarded as the expression of that progressive enlightenment which has undoubtedly taken place. The disuse and dislike of "brutal spectacles" will follow in due course. The development of humane tastes is believed to require a little judicious encouragement. A certain section of the public still derive enjoyment from witnessing performances which jeopardise life. We have advanced so far as to prohibit the risk of infant life, but if any adult is willing to place his life in peril the multitude will crowd to see his performance. It is fair to assume that most of the on-lookers hope he will not be killed, but many are probably indifferent as to the result so that the show be worth the money; and some, it is to be feared, are ready to find their pleasurable excitement enhanced by any catastrophe so that they are not themselves the sufferers. It would be easy to indite a homily against the state of mind and feeling in which a thrill of horror can be undistinguishable in value, if not in kind, from a thrill of pleasure; but it would *not* be easy to show that the emotional effect was of a much higher order in the one case than in the other. The love of adventure which constitutes an important and most serviceable element in the character of man is essentially the same passion which sometimes takes the form of a longing for "sensational" and hazardous amusements. It would be a national calamity if a mawkish sentimentality—what is called "tenderness"—were to replace the instinctive daring of youth, but that passion needs to be refined. The same "feeling" impels the crowd on a shore watching breathlessly the gallant efforts of the crew of a lifeboat to rescue those on board a stranded vessel, and the audience assembled in a music-hall to witness some wondrous flight in the air or some feat that seemingly, or actually, imperils the life of the performer. Sympathy may be charitably supposed to stir the heart in one case and to ennoble that eager curiosity which constitutes the personal sensation in both cases; but the gloss of philanthropy thrown over the state of mind in one instance does not change its nature. No thought of lending assistance can reasonably possess the minds of the multitude of spectators which every now and again crowd the shore of a seaport town or watering-place to witness a shipwreck. It is simply a case of sightseeing

with the majority. It would, we have said, be an evil if this feeling were wholly crushed out of the masses. If every one shrank from the spectacle of danger, there would be no incentive to exceptional deeds of valour such as the vicissitudes of life require. At the same time the appetite for "sensation" must be taught to rest satisfied with the food which the chapter of accidents affords. It cannot be tolerated that the love of perilous feats shall create its own opportunities, and seek gratification at the public expense. We are not disposed to join in the impulsive abuse of the many who "enjoy" performances of the class which has of late years found renewed favour at the music halls. The taste these persons exhibit is *not* essentially "depraved," and the spectacles it is desired to interdict are not "brutal" in any despicable sense. Meanwhile they are "brutish" in the way of being animal, and they need to be corrected and conformed to a higher and better order of intellectual activities; but nothing will be gained by calling persons and exploits by hard names. A plain survey of the facts, and a prudent resolve to prohibit performances of the "dangerous" class, will do more to influence the public mind in a healthy direction than any mere ebullition of "humane sentiment," which is a cheap and poor commodity that common sense has learnt to discount and a true spirit of manliness will not approve. We heartily condemn these performances, but we do so on the ground of expediency quite as much as "humanity." Even if it be thought persons should be at liberty to jeopardise their lives for gain, it is not desirable that the public taste should be pampered by such exhibitions as consist in running risks. Of course, if there be no peril, the whole performance is a sham and a cheat, and ought to be "put down" as a form of imposture.

SANITATION OF CANNES.

PROBABLY the recent visit of the Empress of Russia has attracted a number of correspondents to Cannes, and much has been said and written concerning the sanitary state of the town itself, and of the Villa des Dunes, where the Imperial invalid lay so many weeks. As usual, however, a great many errors have been committed, but none perhaps more important than the assertion that Cannes does not possess a good and sufficient water-supply. This is, on the contrary, the one point in which Cannes especially excels. The water-supply amounts to one cubic metre per second, or 86,400 per day, and it could be doubled if necessary. It is derived from the upper portion of the river Siagne, and by repeated analyses has been proved to furnish the third best water in France. Unfortunately the conduit, thirty-one miles in length, is open, and the water, therefore, collects a certain amount of sand; for this reason it should be filtered, though it is free from organic impurities. With regard to the Villa des Dunes, much has been said concerning an iron drain, from which foul odours are stated to issue. It appears, however, on inquiry, that this drain does not communicate with the Imperial residence, but with the porter's lodge, where, in obedience to an order from Her Majesty, a temporary kitchen had been constructed at the last moment. The Empress very wisely objected to cooking in the basement of the house, and the kitchen within the Villa des Dunes was never used for other purposes than that of keeping the dishes warm and supplying hot water. The drain from the porter's lodge also only contains water from the kitchen and no sewage matter. The latter is collected in a fosse, which is emptied in the summer, when there is no family resident at the Villa. The real defect of the Villa has not been properly denounced. No means were employed to insure the due ventilation of the apartments occupied by the Empress. This was left to chance, and the careful shutting of doors and the use of heavy draperies, reduced this chance to a minimum. The selection of the site also was not fortunate. The railway passes immediately behind, causing much noise, disturbance, and vibration; while in front there are the main road and the beach. If the exciting influence of the sea were not to be feared, there remained the evil odours and the organic particles arising from the refuse and filth which disfigure the beach. We cannot conceive why the authorities should allow this most pleasant walk to be used as the favourite spot for the shooting of dust, animal and vegetable refuse. Here are to be seen the remnants of poultices, egg-shells, cabbage-stumps, half-emptied tins of preserved meats and fish, rags; in fact, all the nondescript and dangerous refuse of neighbouring and even comparatively distant households. Are there no scavengers at Cannes, that this should be allowed? There is no tide to carry the dirt away, and if exceptionally rough weather should bring a wave down upon one of these dust heaps, it is but slender consolation to those who have to bathe in the water next day! While Cannes has many points to recommend it to the invalid, these are a few among the many objections on which correspondents dating from that town have not sufficiently insisted.

THE AFGHAN WAR: CABUL.

OUR latest date from the city of Cabul is Dec. 24th. Our correspondent sends us some particulars regarding the medical arrangements for the wounded, with details of the incessant and harassing nature of the fighting, which had continued with more or less severity since the 10th of that month. The weather he describes as very severe, snow falling almost every night, and the wind even in the day icy cold. The general health of the troops was good, the sick percentage being only 4·2. The hardships and constant exposure were, however, beginning to tell, and the admissions for pneumonia and other pulmonary complaints were daily increasing, the 72nd Highlanders having the largest sick list from chest complaints. The wounded were doing well, and arrangements were in progress for a convoy of invalids, and men able to travel, to start for India under the medical charge of Surgeon-Major Low. The food in Sherpur was plentiful, mutton of an excellent quality being abundant. By the thoughtful care of the Principal Medical Officer, Surgeon-Major Porter, the ration of meat had been increased to one pound and a quarter, while hot soup or cocoa was issued to every man at daylight before turning out for guard or other duty. The men were provided with four blankets each, and in the hospital there were extra blankets for those requiring them. Some delay in finishing the quarters had taken place, owing to the constant alarms and daily skirmishes with the enemy; the men were required to defend the long lines of the Sherpur cantonment, and could not be spared to work at barrack building. The water supply derived from the Cabul river had been temporarily cut off by the Afghans, but some wells were in existence inside Sherpur, and the water from these was sufficiently pure for drinking purposes. Some of the doolies, containing instruments and medical supplies, were abandoned during the retreat on the 16th and 17th, but there still remained a fair supply of surgical and medical stores; others were expected shortly from India. With the large increase of wounded, the hospital accommodation had been found deficient. Dr. Porter met the difficulty by pitching some large tents formerly belonging to Yakoob Khan, and also utilising the wide verandahs of the hospital building, enclosing these with tent walls and numdahs, forming very comfortable quarters. The strain upon the medical department had been very great, little rest day or night being obtainable, but all had worked with a will, and the sick and wounded, European and native, were placed in as comfortable surroundings as the circumstances of the temporary siege permitted.

The Indian papers of a later date than our correspondent's

letter describe the situation in Sherpur after the arrival of General Gough's brigade. The city and bazaars were once more open, Surgeon Owen had re-established the dispensary in Cabul, and was daily distributing medicines and dressing the wounds of Cabulees, who had so recently been our bitterest foes.

CONTAGIOUS DISEASES ACTS.

ON the motion of Colonel Stanley a Select Committee of the House of Commons has been appointed to inquire into the administration, operation, and effect of these Acts. The Committee has power to receive evidence which may be tendered concerning similar systems in the British Colonies, and to report whether the Acts should be maintained, extended, amended, or repealed. It will thus be seen that the question of legislative action, in all its aspects, with respect to contagious diseases, will be re-investigated. The evidence in support of the advantage of the Acts as now worked is so sufficient, and the statistics are so convincing, that their repeal seems to us an impossibility. The question of extension is another matter, and we shall carefully weigh the evidence that will be adduced in favour of or against the procedure. The civilian population is so differently placed, and so many considerations have to be regarded, that the mere health-averages of the army and navy cannot be relied on to solve this part of the problem. The members of the Committee who have been appointed are Mr. Cavendish Bentinck, Mr. Stansfeld, Colonel Alexander, Sir Harcourt Johnstone, Viscount Crichton, Mr. Shaw Lefevre, General Shute, Mr. Burt, Mr. Bulwer, Mr. O'Shaughnessy, and five others. As five are to form a quorum, and the prominent opponents of the Acts are sure to attend, we hope that the other members of the Committee will not fail in giving every attention to a question of such great importance.

THE "PALL MALL GAZETTE" ON THE LUNACY LAWS.

THE tokens of strong but reasonable interest in the project of Lunacy Law Reform multiply. The *Pall Mall Gazette* has recently offered some sensible and suggestive remarks on the subject. Our contemporary is a little outspoken on the question of private asylums, and demands their total abolition. We have already more than once urged that reconstruction would be better, as well as more easily practicable, than wholesale effacement of the private asylum system. Our reasons for proposing to change the monetary relations of the proprietors with their patients, while retaining the institutions and the *personnel* of their administrative staffs, have been repeatedly stated. At the same time we are glad to find the *Pall Mall Gazette* agreeing with us in one important particular—viz., the expediency of committing the duty of certifying to "a public medical officer." Our contemporary says: "At present the law refuses to look behind the medical certificate. It regards neither the scientific nor the moral competence of the men who give it. They may be unfit to decide whether a patient is sane or mad, either for want of knowledge or from the pressure of personal interests. They may be comparatively ignorant of the symptoms of madness, or they may be perilously predisposed to discover them. The only way to remedy this is to insist in every case on an official certificate. Ordinarily speaking, no patient ought to be received into a lunatic asylum unless he has been examined and pronounced mad by a public officer. There is no need that these officers should be what are called experts in lunacy. Every county town would supply one or more medical men perfectly competent, without being of the not altogether desirable "expert" kind; and it might be provided that any doctor might give a provisional certificate, authorising confinement for a short period—say two or three days—in the event of the official doctor not being able to see the patient earlier. In this way the danger of unwarrantable confinement in the first instance would be reduced to a minimum. The other danger, that of confinement after cure had been completed, should be guarded against by similar machinery. The inspection of the patients should be frequent and regular, and be equally conducted by public medical officers." We entirely accept this view of the need and the remedy. The scheme indicated was specifically submitted to the Select Committee of 1877–8, the suggestion being that the Medical Officers of Health, whom it is most desirable to relieve of private practice, should be appointed to give certificates and to visit the cases certified at regular intervals. We have again and again enforced this recommendation in THE LANCET; and trust, with the powerful aid of those of our contemporaries who are beginning to see with us, the proposal will be accepted by the Government and the Legislature, with whom the question of reform now lies.

"NEPHRECTOMY."

THE subject of surgical interference in unilateral renal affections is daily coming more to the front. There are two distinct operative measures here involved—the one consisting in incision into the organ for the relief of pyelitic abscesses or the release of renal calculi; the other in the removal of the whole diseased organ for tumour, calculus, or suppuration. The former class of case is to be styled nephrotomy, the latter nephrectomy. Professor Czerny of Heidelberg has recently recorded in the *Centralblatt für Chirurgie* two operations of the latter kind—one successful, the other not so; and a reprint of his brief memoir is now before us. He admits that in certain cases there can be no question now as to the propriety of the operation of extirpation of the kidney, but that the matter is narrowed to the discussion as to which method should be followed—that of extra-peritoneal operation by incision in the loin, or that of intra-peritoneal by abdominal section, as for ovariotomy. He refers to the successful issue of a case by Professor Martin, where the organ was removed by laparotomy; and also to similar success obtained by Zweifel, who removed a healthy kidney in a case of uretro-uterine fistula. His own two cases were—one of renal carcinoma removed by modified abdominal section through the loin, and one of pyonephrosis by lumbar incision. The former case, which proved the more formidable, from the nature of the growth, was unsuccessful. Here is the record of it:—A wine merchant, fifty years of age, had suffered for two years from a slightly movable, but painful, tumour of large size, projecting from beneath the left costal arch, and occupying the left half of the abdomen. Its renal nature was verified by injecting the colon with water, and finding that the gut lay in front of the swelling. Having explained the gravity of the case to the patient, and informed him that the chances of recovery after operation were about 50 per cent., Professor Czerny was allowed to attempt the only measure that seemed to give any chance of prolonging life. Making the lumbar incision as for colotomy, he divided the outer layer of the mesocolon, and stripped its capsular investment from the tumour. The growth proved to be so soft as to break down under the attempts at removal, and it had further infiltrated the inner layer of the mesocolon. Most profuse hæmorrhage set in, which could only be controlled by pressure on the aorta, and before the operation could be completed a ligature had to be placed round that vessel to obviate death from hæmorrhage. Two hours later there was anæsthesia and paralysis of the lower limbs, and death took place ten hours after the operation. The post-mortem examination showed that the renal artery had been severed, and that the ligature on the aorta had

been placed between the right and left renal arteries, controlling the flow through the latter, but not through the former. The second case was that of a woman, thirty-two years of age, who for four years had suffered from painful micturition. A month before coming under notice an abscess pointed beneath the eleventh rib on the right side. It was opened, and an intermittent discharge took place from it; and it was noticed that when the discharge from the abscess was free the urine was clear, but that much pain, some pyrexia, and pus in the urine ensued whenever the abscess ceased to discharge. A diagnosis of right pyonephrosis, with perinephritic suppuration, and some vesical catarrh, was made. On May 22nd, 1879, Prof. Czerny laid open the fistula parallel to the rib, and, enlarging the wound downwards, inserted his hand and felt a soft placenta-like mass. He then resected a portion of the eleventh rib subperiosteally, and fairly exposed the diseased kidney, which was enlarged to three times the normal size, and was embedded in old blood-clot. Before the organ could be removed it was found necessary to take away another portion of the rib—in all about nine centimetres. He next detached the upper part of the kidney, thereby exposing the cavity of an abscess which gave issue to much pus. A ligature was placed on the vessels on the hilus and the removal of the organ completed; the wound being washed with a five per cent. solution of chloride of zinc and dressed with thymol-gauze. No fever followed, the ligatures came away on the 14th of June, and the patient made a good recovery, although the wound had not quite healed when last seen on Sept. 14th.

From these two cases Czerny concludes that both methods of extirpation are justifiable, but that, *ceteris paribus*, the extra-peritoneal operation is the less severe one. It—i.e., lumbar nephrectomy—should be adopted when the organ is not too much enlarged and is fixed. If it be movable laparotomy may be preferred. In his second case the vertical incision was made along the anterior margin of the quadratus lumborum, and the resection of the rib was had recourse to in order to enlarge the wound sufficiently to permit the passage of the hand. He points out that all risk from the resection is obviated by its being made on the subperiosteal plan.

THE NEW INFIRMARY, EDINBURGH.

OUR Edinburgh correspondent writes:—For a short period during the latter part of the past year and beginning of the present, some of the surgical wards in the New Infirmary have been troubled with an outbreak of erysipelas, associated also with scarlatina. Most of the cases were removed to the special ward in the old hospital. It was worthy of note in relation to the value of antiseptic surgery that, while all the septic cases in one ward might take erysipelatous action, every aseptic case escaped and remained healthy.

A well-marked epithelioma of the lower lip and submaxillary lymphatic gland, occurring in a young man about twenty-five years of age, was removed lately by one of the surgeons. The rarity of this affection at such a time of life constitutes its main interest.

MEDICO-SANITARY NEWS FROM RUSSIA.

A SECOND detachment of sisters, numbering forty-two, had been sent from St. Petersburg into the Government of Poltava, before the 4th inst., to give help in combating diphtheria, and twenty-two medical men had also departed for a like purpose for the same destination. Diphtheria has broken out with great severity at Katherinoslav and Voronege, and has invaded Volhynia. Serious famine is impending in the Caucasus owing to dearth and the destruction of crops by locusts. The government of the province is making large provision for the distribution of articles of food in the localities affected. Owing to the excessive sickness in St. Petersburg, especially, it would appear, the preparation of typhus, the hospital accommodation has become insufficient, and arrangements are being made for the preparation of extemporised hospitals. The municipality has undertaken to provide 200 beds in a disused barrack. Professor Erckmann, reporting to the Sanitary Commission on the sickness and great mortality in the capital, comments on the frightful state of the basements in which the greater part of the poor of St. Petersburg live. He describes them as damp, wanting in ventilation and light, with the air heavy and fetid. Typhus, according to the *Rigasche Zeitung*, is extending frightfully at Wenden. The town never before contained so many sick persons. Professor Botkine resumed his lectures at the Academy of Medicine on the 6th inst. The lecture room was crowded with students and medical men to welcome him.

DR. FARQUHARSON FOR WEST ABERDEENSHIRE.

AT a full and enthusiastic meeting at Aberdeen on the 13th inst., Dr. Robert Farquharson was chosen as a candidate, in the Liberal interest, for the representation of West Aberdeenshire. Dr. Farquharson would be a much-needed acquisition to the House of Commons, which exhibits a sad lack of members capable of dealing wisely and effectively with large questions of public health. Sanitation, as a part of political economy, now holds a prominence which it has never before occupied in this or any other country. It is therefore essential that amongst our legislators there should be men fitted by education and experience to take a wide and statesmanlike grasp of sanitary subjects. Dr. Farquharson fulfils this indication in an eminent degree, and by his acquirements and personal qualities would be a credit to any constituency, and an ornament to our Senate. We should be glad to see him returned at the head of the poll.

MOSQUITOS, FILARIÆ, ELEPHANTIASIS, AND MALARIAL FEVERS.

AT the meeting of the Quekett Microscopical Club last week the President, Dr. Cobbold, exhibited several filariæ from a mosquito forwarded to him from China. At the same time it was mentioned that he had also received fresh communications, not only from Dr. Manson, but also from Drs. Somerville, Bancroft, and J. da Silva Lima. It seems that Dr. Manson has made a new and very important discovery, which probably not only explains the periodicity of malarial fevers, but also many other hitherto unexplained physiological phenomena. At the next meeting, to be held at University College on the 27th inst., Dr. Cobbold will call the attention of the Club to these and other important additions to our knowledge of the filariæ, and the diseases which they occasion.

THE DOVER HOSPITAL.

A COMPROMISE has, it seems, been effected whereby this hospital regains the services of four of its honorary medical officers. It will be remembered that these gentlemen resigned their appointments in consequence of the governors of the hospital having rescinded a rule which prevented a house-surgeon from engaging in private practice in the town until the expiration of two years after his retirement from the post. The compromise, according to the *Dover Telegraph*, is that every resident medical officer appointed to the hospital shall, before entering his office, sign an agreement binding him not to practise as physician, surgeon, or apothecary, or accept any public medical appointment in the borough of Dover, or within two miles thereof, unless he shall have previously served as resident medical

officer for a period of not less than five years, to the satisfaction of the committee. In other words, he must not only serve an apprenticeship of five years in the hospital, but acquit himself to the satisfaction of the committee before he can obtain the right to engage in the practice of his profession in this borough, or its immediate neighbourhood.

MEDICAL LEGISLATION.

THE various Medical Bills have either been read a second time or are in a fair way of being so, and so referred to the Select Committee. We have already expressed our strong feeling against a change in the chairmanship of the committee, and we should be equally opposed to the introduction of new members, who have not heard the evidence already adduced. Our objection would be the stronger if, as is feared, members are to be added who have shown no other interest in medical reform than the utterance of a panegyric on the existing Medical Council and its President. It is not thus that any reform is to be reached or any satisfaction given to the profession. All fears to the contrary, we are disposed to believe that there is a fair prospect of the Committee meeting and reporting in time for practical legislation this year.

SLOUGHING OF THE PANCREAS.

DR. CHIARI showed recently at the Gesellschaft der Aerzte, Vienna, a very singular preparation—a human pancreas which had sloughed and come away by the anus during life. The patient was thirty-eight years old, and until six weeks previously was perfectly well. He then became ill with symptoms of severe colic and intestinal obstruction. The abdomen became enormously swollen and everywhere painful. Then a considerable evacuation of the bowels occurred, the necrosed pancreas was passed per anum, and the man quickly recovered. Rokitansky described a somewhat similar case in 1864, and Chiari recently visited this patient and found him still perfectly well.

ANIMAL VACCINATION.

DR. CAMERON has again brought forward his Bill in the House of Commons to encourage vaccination by providing facilities for the optional use of animal vaccine. The terms are unaltered from those of the Bill he introduced last year, and would give the choice to parents, or others having charge of an infant, as to whether the vaccination should be performed with humanised or animal vaccine lymph, at a public vaccine station, and render it incumbent upon the public vaccinator to use animal lymph, if required. The Bill would also empower the Local Government Board to take the necessary steps for giving effect to such provisions by securing for the public use a supply of animal lymph, and providing for its distribution not only to public vaccinators, but also to medical practitioners practising within the United Kingdom.

THE ARTISANS' DWELLINGS ACT.

A BILL has been introduced into the House of Commons by the Lord Advocate and Sir Matthew Ridley for the amendment of the Artisans and Labourers' Dwellings Improvement (Scotland) Act, 1875, the principal clauses of which are likely to have a very good effect in facilitating improvement schemes.

By Clause 3 it is proposed to enact that in the assessment of compensation for any property which is a nuisance within the meaning of the Act, the sum which would have been necessary for the removal or abatement of such a nuisance shall be deducted from the sum awarded as compensation.

Clause 4 relates to the provision of accommodation for displaced inhabitants; and it is proposed that such accommodation may, subject to the approval of the confirming authority, be provided upon an area other than that which it is sought to improve, and a local authority may, for the purpose of providing accommodation for persons of the working classes displaced by any improvement scheme, appropriate any lands for the time being belonging to them which are suitable for the purpose, or may purchase by agreement any such further lands as may be convenient. It is also suggested in the schedule of the Act that the local authority may, under certain conditions, take only a part of a house, or other building, when such can be done without causing material damage. In this case special facilities are given for appealing and submitting the facts to a jury.

THE NON-PAUPER HOSPITAL QUESTION.

THIS question arose in the Poplar District Board of Works, the Mile-end Vestry inquiring upon what terms the Board would receive non-pauper cases from the parish. The Hospital Committee, whose report was accepted, were clearly of opinion that it would be undesirable for the Board to furnish and open the hospital and receive patients from outside districts at so much per head, and would lead the Board into a preliminary expenditure, the right to maintain which may be doubtful. In answer to the suggestion that the hospital be transferred to the Metropolitan Asylums Board, the Hospital Committee was of opinion that it would be undesirable to open up any negotiations for the sale of the hospital to any authority whatever.

NOXIOUS GASES FROM FACTORIES.

THE important deputation which was introduced to Mr. Sclater-Booth by Lord Derby on the 12th inst. urged upon the Government the advisability of bringing in and pressing forward a Noxious Gases Bill substantially identical with that of last session. On the following day leave for the introduction of such a Bill was obtained, and no doubt it will be printed before many days have passed. We can only hope that it will prove satisfactory to the vast number who are now seeking relief from a great and increasing evil without provoking any serious resistance from manufacturers. We shall refer to the matter again as soon as the first draft of the Bill is in our hands.

THE MARQUIS OF SALISBURY.

THERE are many incorrect reports as to the health of the Marquis of Salisbury. We are able to say that his lordship is *not* suffering from typhoid, that he has had no relapse, and progresses steadily, if not very fast, towards recovery. He is able to do a considerable amount of work.

THE following is the syllabus of nine lectures which will be delivered by Professor Flower, LL.D., F.R.S., in the theatre of the Royal College of Surgeons, commencing on Monday, the 1st proximo, at 4 o'clock, viz.:—Additions to the Museum since the last Course; the Barnard Davis Collection; Baron von Hügel's collection of Crania from the Fiji Islands, presented by Mr. Erasmus Wilson, anatomical characters of the Fijians as derived from this series; the Races of America; Prevalence of artificial cranial deformity; Antiquity of Man in America—Unity or diversity of race; Native races of North, Central, and South America; the Races of Africa; Physical characters of the typical Negro; Modifications of the Negro type—Bantu or Kaffirs; Hottentots—Bushmen; Inhabitants of North Africa, Berbers, Guanches, Arabs, Egyptians, ancient and modern. The course will conclude on Friday, March 19th. It is not generally known that metropolitan hospital students are admitted to these lectures.

DR. DICKINSON, Dr. T. L. BRUNTON, and Dr. FERRIER, have been appointed to report to the Royal College of Physicians on the essays—eighteen in number—which have been sent in for the prize of £100, for an essay on Hydrophobia: its Nature, Prevention, and Treatment, offered by V. F. Benett Stanford, Esq., M.P. The questions which were thought by the College specially to require investigation are:—(*a*) the origin and history of outbreaks of Rabies, particularly in the United Kingdom and its dependencies; (*b*) the best mode of prevention of Rabies; (*c*) the characteristics of Rabies during life, and the anatomical and chemical changes which are associated with the disease in its successive stages, particularly in its commencement; (*d*) the origin of Hydrophobia in man; (*e*) the chemical and anatomical morbid changes observed in the subjects of the disease, with special reference to those having their seat in the organs of the nervous system, and in the salivary glands; (*f*) the symptoms of the disease, particularly of its early stage, as illustrated in well-observed cases; (*g*) the diagnosis of the disease in doubtful cases, from conditions more or less resembling it; (*h*) the alleged prolonged latency of the malady; (*i*) the efficacy of the various remedies and modes of preventing the disease, which have been proposed, and what plan of treatment, whether prophylactic or curative, it would be most desirable to recommend for future trial. Some of the essays received are of considerable length, so that the award of the judges cannot be expected for some months to come.

AT an ordinary meeting of the Board of Conservators of the Severn Salmon Fishery District, held a few days since at Gloucester, there was presented the fourth report on the subject of the contemplated supply of water to Liverpool from the Verniew. In the Bill now before Parliament it is proposed to take 40,000,000 gallons of water per day from that stream, which forms one of the upper sources of the Severn. The scheme was heartily condemned at the meeting, and a resolution unanimously passed to the effect that, in the opinion of the Board, the Liverpool Water Bill should be strenuously opposed. It was stated that the Verniew is the key to the Severn salmon fisheries, and that if the Bill were allowed to pass these fisheries would be destroyed.

DR. LYON PLAYFAIR has the following question down on the papers of the House of Commons for Monday next:—To ask the President of the Local Government Board, whether the eminent and long-continued services of Dr. Farr, who, since 1838, has added so much to our knowledge of vital statistics and public health by his work in the Registrar-General's Office, have received, since his resignation, any public recognition from Her Majesty's Government either in the form of increased pension or otherwise.

THE Imperial Ottoman Government has just decorated Dr. H. Crookshank with the Order of the Osmanié as a further recognition of his services on the battlefields of the Lom when in charge of the ambulances of the Red Cross Society during the late Turko-Russian War. Dr. Crookshank received the military war medal and Order of the Medjidié (4th class) for his services in Bosnia during the Servian war.

MR. STEPHEN ALFORD'S paper, read at the Social Science Association, on the subject of Habitual Drunkards, including an account of a recent visit to the American Inebriate Homes, was interesting; but it and the discussion which followed confirm us in the belief that little impression will be made on habitual drunkards till the law is amended and strengthened.

THE Sultan of Turkey has been pleased to grant the Order of the Medjidie to Dr. George Owen Mead, of St. Bartholomew's Hospital, London, and Mentmore House, Newmarket, for distinguished services in the field. Dr. Mead is a surgeon of the National Aid Society, and served with the staff of Sulieman Pasha, Mehemet Ali, and Baker Pasha in the Russo-Turkish war during the campaign in Bulgaria 1877–8, and was present at Karahassan-Koi, Cherkovna, Yeni Vervoka, Kadikoi, and other hotly-contested engagements, being frequently engaged in dressing the wounded under fire. Dr. Mead obtained the Brackenbury Surgical Scholarship in 1877 at St. Bartholomew's Hospital, and the Turkish war medal, and is now *en route* from the Cape and Natal with troops from the late seat of war.

SURGEON-GENERAL THOMAS CRAWFORD, M.D., has been ordered to Bengal to relieve Surgeon-General H. Ker Innes, C.B., as Principal Medical Officer in the East Indies. Dr. Crawford will be succeeded in Madras by Deputy Surgeon-General Sir Anthony Dickson Home, V.C., K.C.B., who, since his return from Cyprus, has been in charge of the Northern District, York.

THE members of the Edinburgh University Club dined at St. James's Hall on Wednesday, February 18th. Dr. John Lowe of King's Lynn presided. The annual general meeting was held previous to the dinner, and showed the club to be in a prosperous condition.

SURGEON-MAJOR CORNISH, F.R.C.S., the Sanitary Commissioner for Madras, has had conferred upon him the honour of being made a Companion of the Order of the Indian Empire. We welcome even this tardy recognition of his distinguished services.

WE are informed that the Secretary of State for War has appointed a Committee to inquire into the whole subject of the grievances of the Medical Officers of the Guards, and to make recommendations thereon.

THE amount divided amongst the present Medical Staff of the Royal Victoria Dispensary, Northampton (three in number), for their services during the year 1879, was £1937. This is exclusive of the cost of drugs, &c.

BY the decease of Mr. O'Leary, F.R.C.S.I., M.P. for Drogheda, two vacancies have arisen—viz., that of Examiner in the Royal College of Surgeons in Ireland, and the Visiting Surgeoncy to St. Vincent's Hospital, Dublin.

AN extraordinary prize of 3000 francs has been awarded by the French Académie des Sciences to Mr. Crookes, F.R.S., in recognition of his recent discoveries in Molecular Physics and Radiant Matter.

THE Prince of Wales has consented to preside at a festival dinner in aid of the Westminster Hospital, to be held on March 13th, at Willis's Rooms.

ON the 12th inst. Dr. Mussen was elected, without opposition, coroner for the Belfast district, in room of Dr. Hume, deceased.

THE profession will hear with regret of the death of Richard Rainsford, M.B., F.R.C.S.I., of Dublin, which took place on Tuesday last, after a lingering illness.

THE Duke of Edinburgh has accepted the office of President of the Charing-cross Hospital, in succession to Lord Overstone, who has resigned.

NAVAL MEDICAL REFORM WARRANT.

I.

WE are far from supposing that the Army Warrant is perfect, yet it has undeniably disparaged the Navy more than ever. We find indeed that the former, including the Indian service, boasts of ninety-four candidates at the February examinations, while the latter service has picked up only five.

The Admiralty, whose defective Medical Orders in Council have been of late years unusually numerous, may well desire breathing time before exploiting another, so that the voice of the profession may be heard from outside, to guide them in framing such a one as may give the department the repose it has not enjoyed of late. We therefore venture to suggest the principal points that, as we think, need alteration, and we do so with the conviction that our suggestions will represent the *minimum* of what is now due in the way of reform.

It must be borne in mind that the last inquiry by Committee into the state of the Naval Medical Department was held in 1866, and that on its recommendations the Admiralty placed on record, by acceptance, several essential principles that cannot be now departed from without exciting discontent in an aggravated degree with any new Order in Council.

Our intention is to review in succession the leading points of the Army Warrant which materially affect the Navy, and to suggest, in passing, ways to remedy them.

Full-pay will ever constitute a point of primary importance with professional men, and there is no need to discuss what is asserted by the logic of facts—viz., that medical men cannot be got to serve in the navy on the same rates of daily pay as they would receive in the army so long as they are forcibly exposed to losses by compulsory half-pay. Further, the Admiralty fully accepted this proposition in their Order in Council of the 6th July, 1866, by which the full-pay was raised throughout the branch to a higher scale than that existing in the army, in accordance with the views of their mixed Committee of Navy and Army officers with representatives deputed by the Colleges of Physicians and Surgeons.

Since then various Orders in Council have been manufactured for both army and navy, without infringement of that principle, until the recent Warrant for the army, which has advanced its pay above that of the navy. The Naval Medical Service now claims to have the balance restored in its favour, by raising its scale of pay above the new scale of the sister service, in ratios approaching to those that existed previously. The *means of full-pay* given to each service immediately preceding the issue of the recent army Warrant are shown in Table I. Presuming that these tables are worked out on the assumption that promotion is given to surgeons of twelve years' service in both Army and Navy, and from staff-surgeon to fleet-surgeon after twenty years of full-pay service, the periods of twelve, eight, and ten years are adopted to display the averages of yearly pay during each of these periods.

TABLE I.

	Twelve years.	Eight years.	Ten years.	Thirty years in all ranks.	New rank of Brigade-Surgeon.	
Navy	Surgeon.	Staff-Surgeon.	Fleet-Surgeon.		On Promotion:	After five years:
Army	Surgeon.	Surgeon-Major.			Minimum.	Maximum.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Navy, at present	223 2 6	367 5 0	569 3 6	358 18 4		
Army, before Warrant ..	216 14 6	347 17 6	465 7 6	234 11 8	547 10 0	602 5 0
Difference	11 8 0	19 8 0	43 16 0	24 6 8	—	—
Percentage in favour of Navy	5¼	5½	9½	7¼	—	—

TABLE II.

	Twelve years.	Eight years.	Ten years.	Thirty years in all ranks.	After twenty years' service. New rank: Brigade-Surgeon.	
Navy	Surgeon.	Staff-Surgeon.	Fleet-Surgeon.			
Army	Surgeon.	Surgeon-Major.				
Army, New Scale of Pay ..	£223 2 6	£368 10 0	£479 0 0	£367 17 6	£547 10 0	£602 5 0
Percentage increase to Navy ..	5¼	5½	9½	7¼	—	—
Value of Percentages	£12 5 5	£21 19 0	£45 1 7	£26 1 9	—	—
Navy, relative increase ..	£245 7 11	£415 8 0	£524 1 7	£393 19 3	£547 10 0	£602 5 0

TABLE III.

Number of years	Twelve years.	Eight years.	Ten years.	Thirty years.	Twenty to thirty-three years.	
In rank of	Surgeon.	Staff-Surgeon.	Fleet-Surgeon.	All grades.	Brigade-Surgs., not yet established in the Navy.	
Mean yearly pay:	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Minimum.	Maximum.
New Scale of Army Pay ..	223 2 6	368 10 0	479 0 0	367 17 6	£ s. d.	£ s. d.
Navy (Calculated increase to ..	245 8 0	415 8 0	524 2 0	383 19 3	547 10 0	602 0 0
Navy (By Scheme A, for increase	235 14 6	410 12 6	520 2 6	377 2 6	—	—
Navy (By Scheme B, for increase	234 2 6	410 11 0	511 0 0	373 10 0	—	—

In Table I. we have the elements of the problem that has to be worked out in justice to naval medical officers of the executive grades, inclusive of all ranks of surgeons—viz., the restoration approximately of the higher percentages existing by Orders in Council and by Admiralty and War Office Circulars previous to the late Army Order in Council of 27th November, 1879, and the establishment of a still higher but contingent scale of emoluments equivalent to what has been fixed for the new rank of "Brigade Surgeon" of the army, attached to that of Surgeon-Major, which is equal to that of Fleet Surgeon of the navy.

The next step will be to construct a scale of full-pay for the naval service, which shall, as nearly as possible, have regard to the principle of compensation for loss of time on compulsory half-pay; taking, as before, the ordinary periods of service in each grade of rank, and adding to the army new scale of pay the same percentages in favour of the navy as existed previous to the recent Army Warrant, which are shown in Table II.

These relative advantages in full-pay being now due to the naval surgeons, there are two courses by which those results may be achieved, of which the first (A) is in accordance with the existing scale of pay, with yearly increments of 1*s.* a day to staff and fleet surgeons; and the second (B) is a proposal more in accordance with the periods adopted by Order in Council of 6th July, 1866, so as to bring the periods more parallel with those adhered to for the army. (Table III.)

It happens that either of these principles is capable of being worked so as to evolve a scheme that shall bring the full pay of the navy not far from the higher percentages that existed in its favour prior to the late Army Warrant. In offering these for consideration, A represents the changes required in the present rates of pay, and B those in case of the principle of four- for five-yearly periods of service, justly adopted in 1866, being reapplied.

In Table I. are shown the percentages of increase, and under Table II. the means of periods required to restore to each grade of surgeons the percentages shown in Table I.; and Table III. gives the results of calculations carefully made in concurrence with the present and previous systems of payment organised for the use of the navy.

Having commenced with an intention to offer what we consider to be *the minimum of pay* due to the navy, with regard to its specialty of loss of time, we now appeal to these proposals in proof of moderation, but with the hope that the Admiralty will go beyond them in its new Warrant. The results, after thirty years' service, which very few fleet surgeons can reach, are below the calculated percentages, and it is so likewise with service in each grade of rank, but greatest in the grade of fleet surgeons, where it had grown since the Warrant of 1866 to nine per cent. in advance of the relative rank in the army. As the emoluments of army surgeons have progressed, so it should be with those of the navy, and at such a juncture as the present it would be well to settle them on a basis pervaded by a similar principle, which, in this scheme, is generally that of 2*s.* 6*d.* a day increase every four years, with greater benefit on promotion to staff surgeons' rank.

With regard to the new rank of Brigade Surgeon, the Admiralty may be slow to institute it; but there can be no doubt of the increase in pay due to it being a just claim on the part of Fleet Surgeons, who can but rarely exceed thirty years of full-pay service, while their brethren of the army readily reach thirty-three years. This difference is open to equalisation by a general increase in the pay of the former after the twenty-sixth year, when it is now at its maximum, or by giving to those serving in dockyards and marine divisions the same allowances as when employed in naval hospitals. Of these alternatives the former would perhaps be generally preferred, as it would be equally beneficial to all, whether serving ashore or afloat, whereas the latter would be suspected of keeping the door more widely open to favouritism than ever. The system of a second examination, exacted to a fair standard, before promotion to staff surgeon rank, is, at least, on the *primâ facie* presumption that those who press it are competent, professionally, to undertake any functions of their future rank; and, so long as they continue to serve, it must be a source of more general satisfaction to have full-pay regulated solely by length of service.

Concerning the future full-pay of the inspectorial ranks we imagine that there is no room for suggestion, in view of Art. III. of the Army Warrant, fixing to each of the grades its uniform rate of pay irrespective of length of service, so that the Admiralty will scarcely be free to fix any other rates than these in their unavoidable new Warrant.

The points of retirement and retired pay must be left for future examination.

HEALTH OF LARGE ENGLISH TOWNS.

SIXTH WEEK OF 1880.

THE effect of the recent cold and foggy weather does not seem to have yet fully expended itself on the rate of urban mortality, which again last week showed a marked excess, notwithstanding the much higher temperature that prevailed. In twenty of the largest English towns, estimated to contain in the middle of this year seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 5303 births and 4323 deaths were registered last week. The births were 118, and the deaths so many as 1048, above the average weekly numbers during 1879. The deaths, however, showed a decline of 989 from the exceptionally high number in the previous week. The annual death-rate in the twenty towns, which had been equal to 26·0, 29·7, and 37·0 per 1000 in the three preceding weeks, declined again last week to 30·1. The lowest death-rates in the twenty towns last week were 19·3 in Leeds, 19·7 in Leicester, 19·9 in Brighton, 20·2 in Portsmouth, and 21·4 in Sheffield. The rates in the other towns ranged upwards to 28·6 in Newcastle-upon-Tyne, 29·8 in Liverpool, 30·6 in Plymouth, 31·2 in Nottingham, and 35·5 in London. The rate in London again showed a relatively large excess; the average rate in the nineteen large provincial towns did not exceed 24·9 per 1000, against 35·5 in London.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had steadily increased from 519 to 637 in the four preceding weeks, declined again last week to 589; they included 279 from whooping-cough, 110 from scarlet fever, 84 from measles, and 52 from fever, principally enteric. Whooping-cough showed the largest proportional fatality in Salford, Newcastle-upon-Tyne, and London; measles in Nottingham, Hull, and Plymouth; and scarlet fever in Sunderland, Bristol, and Bradford. Enteric fever shows fatal prevalence in Sheffield, where 10 deaths from that disease were recorded, including 7 in the workhouse. Twenty deaths were referred to diphtheria in the twenty towns, of which 13 occurred in London and 4 in Liverpool. Small-pox caused 12 more deaths in London, but not one in any of the nineteen large provincial towns. The prevalence of small-pox shows a considerable further increase in London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 80 and 91 at the end of the two preceding weeks, further rose to 126 on Saturday last. The number of new cases of small-pox admitted to these hospitals during the week was 57, against numbers increasing from 8 to 36 in the four preceding weeks. This was a higher number of admissions than in any week since March last.

The fatality of lung diseases again showed a marked excess in London last week. The deaths referred to diseases of the respiratory organs within registration London, which had been 559, 759, and 1567 in the three preceding weeks, declined again last week to 1020, but showed an excess of 551 upon the corrected weekly average; of these 1020 deaths, 760 resulted from bronchitis, 171 from pneumonia, and 29 from asthma. The annual death-rate from lung diseases in London during the past six weeks of this year has averaged 11·5 per 1000. In Liverpool, which is the only other of the twenty large towns from which this information is available, the death-rate from lung diseases during the same period has not exceeded 9·2 per 1000.

ABERDEEN DISPENSARY.—At a meeting of the directors of the Aberdeen Dispensary, held last week—Lord Provost Jamieson presiding—it was resolved, on the recommendation of the Standing Committee, to change the system of retirement of the medical officers of the Board, so that in future, instead of one doctor retiring every year, the retirement should take place once in two years. The effect of this will be that the staff will hold office for twelve years instead of six years, as at present.

Correspondence.

"Audi alteram partem."

IS INSANITY CAUSED BY "DRINK"?

To the Editor of THE LANCET.

SIR,—A leading article in your last issue discusses the question of "assigned causes" of death. Will you allow me to draw attention to the important fact that the "assigned causes" of disease are, as a rule, no better than the so-called "causes" of mortality to which your remarks principally apply. The method pursued in compiling or collecting evidences of causation is to ask leading questions of ignorant or prejudiced sufferers and their friends. What, for example, can be more insufficiently supported than the conclusion that drink is a considerable "cause" of insanity? The insane persons brought to asylums are not on admission in a state to form *any* judgment as to the causes of their derangement, and the reflections to which they are instigated after convalescence are manifestly worthless. By far the commonest cause of insanity is, I am persuaded, one which few men or women would be disposed to admit—namely, mental enfeeblement produced by mental debauchery, associated with, culminating in, and often seeming to be relieved by, physical abuse, which engenders first a recourse to restoratives, and then a longing and love for drink, either for its own sake or the passing sense of vigour it inspires. In this case the craving is a symptom or an effect, not a *cause*.

There is manifestly this fatal objection to guesses about the subjective experiences of a lunatic, not less than those of a "hypochondriac," or *malade imaginaire* of any class—namely, that it is almost impossible for a sufferer to discriminate between early symptoms and causes.

The crucial tests which must be applied to the question whether drink is a considerable "cause" of insanity are first practical and then pathological. How many instances does the average general practitioner, with a fairly-long experience, remember, or can he adduce, of habitual drunkards who have become insane? They have died of liver or kidney disease, they have had delirium tremens—a totally different matter from becoming insane—and they have been attacked by apoplexy, but they have *not* in any considerable proportion gone mad. This is a notable and significant fact.

The bulk of the evidence, on which the hypothesis that "drink" is a large factor in the causation of insanity rests, comes from the asylums, where obviously the least facilities exist for forming a judgment. If the facts were as they are represented to be, I venture to think that the general practitioners of the country would be the witnesses to this issue of intemperance rather than the medical officers of asylums!

This point is worthy of discussion by those competent to throw light on the fact—that is to say, general practitioners with extensive fields of observation. And it should be discussed on the basis of *records of practice*, without prejudice or a preconceived opinion.

Again, how *can* drink produce insanity? It is difficult to imagine that it is possible it should do so, otherwise than by producing degeneration of brain or nerve structure, which would set up special and recognisable forms of disease, or by inducing some variety of cerebritis which also would give rise to distinctive results. The proliferation of connective tissue is one of the prominent pathological changes produced by alcohol in the structure of numerous organs where its effects have been most carefully studied. The brain and nerve-centres of lunatics should present a corresponding condition if the cause of insanity were drink. Is it not, however, the fact that in those special forms of brain and nerve disease accompanied by "mind symptoms" which are commonly attributed to drink—e.g., general paralysis of the insane,—any abnormal increase of connective tissue found is rather *compensatory* than *causal*, as evidenced by the presence of interspaces between the atrophied corpuscles, or nerve elements, and the proliferated tissue?

It is not enough to say "drink is a common and increasing cause of insanity." We require to be told the particular physical changes it induces, and by what pathological process the result is reached. And if such a cause can be shown to exist, it will of course be possible to find cases in the various stages of decadence to the level of lunacy, so that the question of "causation" shall not, as now, be left in scientific obscurity glossed over by a fashionable conjecture which places everything in doubt.

The subject is one of pressing interest, because a graver mischief than any which can be caused by drink is veiled. If a real advance is to be made in the elucidation of etiology this must be accomplished by more precise methods of inquiry, and better and more responsible "returns" than those whereby the data now at the disposal of the profession are obtained. It is of high moment that results of all classes should be traced to their true sources, but it is better not to speak of "causes" unless we are quite sure that those "assigned" are something more than *suspected*. It is with the *positive* in causation, as in every other phase of development, science must deal.

Yours obediently,

Scientific Club, Savile-row. J. MORTIMER-GRANVILLE.

DEATH FROM CHLOROFORM.

To the Editor of THE LANCET.

SIR,—The report of the death from chloroform at the Lynn Hospital, as detailed in a letter in your last issue, prompts me to make a few remarks upon the treatment of these cases, especially as they have been somewhat numerous of late.

I do not think that many who administer chloroform appreciate the importance of *immediate*, systematic artificial respiration being adopted at the first appearance of the natural cessation or failure of these functions, and often the valuable *seconds*, which may make the difference between the life or death of the patient, are wasted by watching to see if breathing has returned, or is likely to return, by dashing cold water on the face and other efforts, which, though indirectly of some service perhaps, cannot cope with the real danger. Engaged in considerable ophthalmic and general surgical practice, I must have administered or caused to be administered, some form of anæsthetics (chiefly chloroform) several thousands of times within the last fifteen years, and it affords me great pleasure to say that I have never witnessed a death from any of these agents. I have notes of five cases in which death seemed imminent, but was averted. The plan which I always adopt is to commence at the first appearance of danger Silvester's method of artificial respiration, and continue it until natural respiration is completely established. If plenty of assistants are at hand they may apply other adjuvants, such as cold applications, galvanism, enemata, &c., but the person who *has commenced artificial respiration* should *continue uninterruptedly*, and without a moment's cessation, his efforts, nor should they be discontinued, under any pretext whatever, until life returns, or the patient is unmistakably beyond the reach of medical aid.

I am, Sir, yours, &c.,

CHRISTOPHER S. JEAFFRESON, F.R.C.S.

Newcastle-on-Tyne, Feb. 16th, 1880.

ABSORBENT AND MEDICATED SURGICAL DRESSINGS.

To the Editor of THE LANCET.

SIR,—Since you favoured me by publishing my article under the above heading (THE LANCET, Jan. 24th, p. 127), many cases in the practice of other surgeons, as well as in my own, have proved the perfect comfort, and great therapeutic value, of the absorbent cotton-wool and gauze pads, with and without antiseptic and styptic medication.

I beg leave through your columns to express regret for sending such scanty specimens to those gentlemen who have applied to me for the materials. The fact is, such has been the demand that it has been impossible to meet it. This difficulty cannot recur, as the matter has been taken in hand by the well-known manufacturing chemists of this town, Messrs. Southall Brothers and Barclay.

Amongst many other cases, I have lately employed the pads after two operations for strangulated hernia. In the first (aged seventy-five, five days' strangulation, femoral, sac opened), cicatrix solid, and the patient left her bed the eleventh day, after three dressings. In another (aged thirty-four, large bubonocele, acute strangulation, sac

opened), the temperature was normal, the cicatrix firm, and the man out of bed the eighth day.

The suggestion to use the pads in childbed, instead of napkins, has been acted on by several accoucheurs, who speak of their comfort and purity with approval.

I am, Sir, faithfully yours,

Birmingham, Feb. 15th, 1880. SAMPSON GAMGEE.

TREATMENT OF ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—Will you kindly grant me a small space to correct an error into which Dr. Sinclair has fallen in referring to some cases of rheumatism published by me a year or two ago?

Dr. Sinclair says: "The results show ..... three fatal cases in a total of sixteen." Sir, the *total* number of cases was *not* sixteen; those were only the selected cases out of some sixty or seventy, amongst which I naturally recorded *all* the fatal ones. We have had, as may be supposed, many more cases since, but without another death from any cause.

I care not whether this or that drug is beneficial in rheumatism, but in judging of their respective merits, let us give each one fair play.

I am, Sir, your obedient servant,

Harley-street, W., Feb. 17th, 1880. JULIUS POLLOCK.

PREGNANCY AFTER OVARIOTOMY.

To the Editor of THE LANCET.

SIR,—The replies to "Beta" in to-day's issue fully set at rest the question whether the sex of the child is determined by the ovary from which it is generated. In my patient the right ovary was removed. Dr. T. J. Walker, who operated, writes me: "Another of my patients had a child after ovariotomy, but I have not noted which ovary was removed, nor do I know the sex of her child. A third has, I believe, had children, but I have lost sight of her."

I am, Sir, yours, &c.,

Henrietta-street, Feb. 14th, 1880. C. F. HARDING, M.D.

PARLIAMENTARY PROCEEDINGS.

HOUSE OF COMMONS.

Thursday, Feb. 12th.

WATER-SUPPLY OF LONDON.

MR. FAWCETT asked the Home Secretary when the Bill relating to the water-supply of London would be introduced.

Mr. SCLATER-BOOTH, on behalf of his right hon. friend (Mr. Cross), stated that the Bill in question was in a forward state of preparation; but he was not at that moment in a position to say on what day it would be introduced.

Obituary.

JAMES CASKIE, L.F.P.S. GLAS.

MR. CASKIE, whose death took place on Feb. 5th, at the age of seventy-nine, was a native of Stewarton. After attending at the University of Glasgow, he settled at Largs, where he practised for the long period of fifty-four years, and of which town he was medical officer of health. Long before his appointment to this post, however, he was engaged, with others, in the promotion of sanitary improvements in the town, and in 1856, after the first appearance of cholera in this district, he published an address on the importance of cleanliness, ventilation, and other hygienic arrangements. Many people believed that the pamphlet assisted in inaugurating the excellent system of drainage in use at Largs, whereby every street and lane in the town is flushed with the waters of the Gogo, thus lessening the virulence of the epidemics of typhus, which had formerly been frequent and fatal. In January, 1878, a number of his friends presented Mr. Caskie with a silver tea and coffee service in recognition of his worth as a citizen, and of his skill and kindness as a medical practitioner; and at the time of his death a large sum had been subscribed for the purpose of presenting him with a life-sized marble bust of himself, which will now probably revert as a welcome memento to his bereaved family.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates of the College on Feb. 16th:—

Baker, William James, Millbrook, Southampton.
Paddle, James Isaac, University College Hospital.
Shears, Chas. Hartley Bedwell, St. Bartholomew's Hospital.
Stokes, Henry Fraser, Compton-terrace.
Weed, Theodore Arthur, M.D. Wooster, Strand.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 12th:—

Battiss, William Sullivan, London Hospital.
Ensor, Theodore Francis, Milbourne Port, Somerset.
Finch, Alfred, Blackheath.
Jones, Robert, Easteddefa, North Wales.
Knight, George Henry, Wimbledon.
Rygate, David John, Cannon-street-road.
Walker, William Frederic, Saltoun-road, Brixton.
Wall, George Braithwaite, Bockerstaffe, Ormskirk.

The following gentleman on the same day passed the Primary Professional Examination:—

York, Thomas Hutton, Queen's Hospital, Birmingham.

UNIVERSITY OF DUBLIN.—The following degrees were conferred last week:—

BACHELOR IN SURGERY.—Abraham Cohen, John Singleton Darling, Malcolm Henry Moore, Alexander Silcock, David Chadwick Smith.
BACHELOR IN MEDICINE.—Charles Hampden Dixon, Richard Charles Coleman Hickson, John Seymour Kane, Thomas John Rashleigh Lucas, Alfred Mason, E. Erskine Moore, Francis Albert Mouillot, William Johnstone Patton, Alexander Silcock, David C. Smith, Richard Charles Studdert.
DOCTOR IN MEDICINE.—Henry Nathaniel Dudley, Richard Charles Coleman Hickson, Jonas Sealy Poole.

THE Lurgan Guardians have increased the salary of the medical officer of the workhouse by £50 yearly.

SEVERAL fines have been imposed at Brighton for infringement of the Compulsory Vaccination Act.

DR. JOHN T. BANKS has been appointed Governor of the House of Industry Government Hospitals, Dublin, *vice* Sir D. Corrigan, Bart., M.D., deceased.

OWING to the prevalence of measles, the Bangor Local Board of Health have found it necessary to recommend the closing of elementary schools in the town for a month.

MR. J. D. JEFFERY, late medical officer of the Worcester Workhouse, has received a superannuation allowance of £40 per annum.

AT the meeting of the supporters of the Birmingham Hospital Saturday movement last week, it was announced that the amount of the last collection was £3422, as against £3188 in the preceding year.

IT has been decided that the unhealthy Monderaggio, or Seven Dials of Malta, shall cease to exist, and dwellings constructed on sanitary principles be provided for its densely-crowded, poverty-stricken inhabitants. This reform comes not before it is needed.

DR. J. G. M'KENDRICK has brought to a conclusion his course of lectures on the Brain and the Senses, which have been delivered during the past six weeks in the Free Church College, Aberdeen. From the first lecture to the last the attendance has been exceedingly large, the College Hall being filled on every occasion.

THE managers of the Women's Hospital in Birmingham have, we are informed, made arrangements to connect by telephone the in-door and out-door departments, and these with the doctors' residences. This arrangement will save time and trouble, and enable the managers to control the out-patient department in the county as easily as the in-patient department in the town.

THE HOSPITAL FOR SICK CHILDREN.—The annual festival will be held on Thursday, April 8th, 1880, at Willis's Rooms, King-street, St. James's. Sir James Paget, Bart., F.R.S., has consented to take the chair.

VACCINATION GRANTS.—The following gentlemen have obtained a Government gratuity for successful vaccination in their respective districts:—Mr. William Arrowsmith, Darlington (fourth time), £63 7s.; H. de M. Pentland, Leominster, £17 18s. (third time); Dr. A. F. A. Fairweather, of the Pocklington Union, £5 12s.

CARDIFF MEDICAL SOCIETY.—The annual meeting of the members was held at the Infirmary, Cardiff, on 15th January, when the following officers were elected:—President, Dr. A. P. Fiddian; Vice-President, Dr. Thos. Wallace; Committee, Mr. C. E. Hardyman, Mr. John Evans, Dr. F. W. Evans, and Dr. Campbell. Hon. Sec. and Treasurer, Mr. Thos. Garrett Horder.

SMALL-POX IN DUBLIN, 1879.—During the past year small-pox caused 520 deaths in the Dublin Registration District, being a decrease of 30 as compared with 1878. The number of patients suffering from the disease admitted to the Dublin Hospitals was 1797, there being actually in hospital at the end of the year 77 cases. Of the 520 deaths recorded, 405 took place in hospitals; and estimating the number of cases outside hospitals by the rate of mortality within these institutions, it is probable that there were altogether not less than 2200 cases of small-pox in the Dublin Registration District during 1879.

ST. JOHN'S AMBULANCE ASSOCIATION.—In connexion with the above association a course of lectures has just been concluded at the Mission Hall, Prince's-street, Wapping. The subject of the course, which was delivered by Dr. William Collingridge, was the General Structure and Functions of the Human Body, the Recognition and Immediate Treatment of Injuries of all kinds, Fits, Cases of Drunkenness, Insensibility, &c., until proper medical attendance can be procured. A final lecture was given by Mr. John Furley, of the association, on "Transport of Sick and Wounded." The class consisted chiefly of superintendents and overseers of docks, &c.

LONDON FEVER HOSPITAL.—Lord Devon presided at the annual meeting of the governors of this hospital, held this week at the Freemasons' Hall. The medical officer's report stated that 817 patients were admitted during the year, and, with 91 who remained from the previous year, a total of 908 were treated during the twelvemonth. Of these, 7 were cases of typhus, 82 of typhoid, 666 of scarlet fever, 74 of measles, 10 of diphtheria, and 68 of other diseases. A large number of these cases, though of the class above paupers (who are provided for in other institutions), were admitted without payment. Of the cases 123 came from other institutions. The President expressed his deep regret at finding that the committee of management had again to call attention to the fact that the annual expenditure much exceeded the income of the charity (owing to old subscribers having died off). He added that the affairs of the hospital were economically conducted, and he was astonished that the public should allow the funds to fall to a low ebb, especially considering its important work.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, London.
A Movable Atlas of the Human Body. By Professor G. J. Witkowski, M.D. Translated into English by Dr. R. H. Semple. Parts I. to IV.
Aids to Materia Medica. By Armand Semple.
Aids to Physiology. By Thompson Lowne.
Observations on Fatty Heart. By H. Kennedy.
Chirurgie Antiseptique. By Dr. J. Lucas-Championnière.
Contributions to Cardiac Pathology. By John Cockle, M.D.

J. & A. CHURCHILL, London.
An Atlas of Human Anatomy. By R. J. Godlee. Part XI.
The Student's Guide to Surgical Anatomy. By E. Bellamy.
Student's Primer on the Urine. By Dr. J. T. Whittaker.
Post-mortem Examinations. By Professor R. Virchow.
Headaches. By Dr. W. H. Day.
The Spectroscope in Medicine. By Dr. E. A. Macmunn.
Pseudo-Hypertrophic Muscular Paralysis. By Dr. Gowers.
Manual of Minor Surgery and Bandaging. By C. Heath.
Cancer of the Rectum. By Mr. Harrison Cripps.

HODDER & STOUGHTON, London.
Studies in Life. By Dr. H. S. Paterson.

H. K. LEWIS, London.
A Note-book of Solubilities. By J. Eagle.
Handbook of Therapeutics. By Dr. S. Ringer.

J. B. LIPPINCOTT & Co., London.
Paracentesis of the Pericardium. By Dr. J. B. Roberts.

LONGMANS, GREEN, & Co., London.
Economic Studies. By the late Walter Bagehot. Edited by R. H. Hutton.

MACMILLAN & Co., London.
Pharmacology and Therapeutics, or Medicine Past and Present. By T. L. Brunton.
Hints to Housewives. By Mrs. Frederick.

SMITH, ELDER, & Co., London.
A Manual of Skin Diseases. By Malcolm Morris.
A Rule of Proportion for the Human Figure. By John Marshall.

J. VAN VOORST, London.
The Micrographic Dictionary. By Messrs. Griffith and Henfrey.

Die Messung des Pulse und des Blutdrucks am Menschen. Von Dr. L. Waldenburg. (M. A. Hirschwald, Berlin.)—Conférences Pratique de Médecine Légale. Par E. Elément. (Paillière et Fils, Paris.)—Letts's Popular Atlas. Part I. (Letts & Son, London.)—The Girl's Own Paper; February. The Sunday at Home; February. The Leisure Hour; February. The Boy's Own Paper; February. (The Religious Tract Society.)—Good Words; February. The Sunday Magazine; February. (Isbister & Co.)—Fraser's Magazine; February. (Longmans, Green, & Co.)—Annals of the Anatomical and Surgical Society. (G. P. Putnam & Sons, New York.)—Time; February.—The Contemporary Review; February. (Strahan & Co.)—Atlas of Histology. By Dr. E. Klein and E. N. Smith. Part X. (Smith, Elder, & Co.)—Notes to accompany Mr. Wyld's Map of Central Asia and Afghanistan. (Mr. Wyld.)—Whitaker's Almanack for 1880. (J. Whitaker.)—Influence des Corps Gras sur l'Absorption de l'Arsenic. Par le Docteur A. Chapuis. (Baillière et Fils, Paris.)—The Relationship of Anatomy to the Fine Arts. By S. Messenger Bradley. (J. Heywood, Manchester.)—Nagra ord, om mina nyuppfunna metoder att göra fartyg helsosamma och omöjliggöra farsoters uppkomst och utbredning om skeppsbord jemte förslag till tidsenliga och högst nödvändiga hygieniska förbattringar a fartyg. By Dr. Fredrik Eklund. (A. L. Normans, Stockholm.)—Vierteljahresschrift für Dermatologie und Syphilis. (Wilhelm Braumüller, Wien.)—Bentley and Trimen's Medicinal Plants. (J. & A. Churchill.)—The Waters of Kreuznach. By Dr. Engelmann. (J. & A. Churchill.)—Climate and Health of South Africa. By Mr. J. Bonwick. (S. W. Silver & Co.)—On Common Lodging-house Accommodation. By F. Vacher. (T. Richards.)—On some Substitutes for Alcohol in the Treatment of Fevers. By F. Vacher. (National Temperance Publication Depôt.)—The Victorian Review. (The Victorian Review Publishing Company, Melbourne.)—Annual Report of the Supervising Surgeon-General of the Marine-Hospital Service of the United States for 1878 and 1879. (Government Printing Office, Washington.)—A Detached Left Occipital Lobe and other Abnormalities in the Brain of a Hydrocephalic Imbecile. By A. C. Clark, M.B. (Alex. Rivington, Lewes.)

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ARMITAGE, W. H., L.R.C.P.Ed., L.F.P.S.G., has been reappointed Medical Officer of Health for the Over Darwen Urban Sanitary District, Lancashire, at £120 per annum, until the 29th September, 1881.

BIRDWOOD, R. A., B.A., M.R.C.S.E., has been appointed House-Surgeon to the Gravesend Dispensary and Infirmary, vice Flight, resigned.

BOWLBY, Mr. A. A., of St. Bartholomew's Hospital, has been appointed Registrar and Chloroformist to the Evelina Hospital, Southwark-bridge-road, vice Burgess, resigned.

BROOM, C., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Wednesfield District of the Wolverhampton Union.

COGAN, L. F., L.R.C.P.Ed., M.R.C.S.E., has been appointed an additional Medical Officer to the Royal Victoria Dispensary, Northampton.

CROOKSHANK, H. M., L.K.Q.C.P.I., M.R.C.S.E., has been appointed a Medical Officer to the North Kensington and Kensal-town Provident Dispensary, vice Gell, resigned.

CULLIMORE, D. H., M.K.Q.C.P.I., F.R.C.S.I., has been appointed a Physician to the North-West London Hospital.

DE LA HUNT, J. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Attendant to the Royal Irish Constabulary, Lawrencetown, co. Galway, vice Brodie, resigned.

DIXON, H., M.D., L.R.C.P.Ed., has been elected a Physician to the Sunderland Infirmary, vice Bowman, resigned.

EASTALL, H. F., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Halford District of the Shipston-on-Stour Union, vice Sherrard, resigned.

EWART, W., M.B., M.R.C.P.L., has been appointed an Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, vice Thompson.

FISHER, F. C., M.R.C.S.E., L.S.A.L., has been appointed Assistant House-Surgeon to St. George's Hospital, vice Sheild, appointed House-Surgeon.

FORSYTH, R., M.D., C.M., has been appointed Medical Officer for the Fourth District of the North Bierley Union, vice Hunter, deceased.

GOULD, A. P., M.Ch., F.R.C.S., has been elected Surgeon to the British Equitable Assurance Company, vice E. Carr Jackson, deceased.

GRIFFITH, G. R., M.B., C.M., has been appointed Medical Officer for the First Carnarvon District of the Carnarvon Union.

GRIMSHAW, T. W., M.D., has been appointed a Consulting Physician to Steevens's Hospital, Dublin, vice Burke, deceased.

HALL, F. de H., M.D., M.R.C.P.L., has been elected Honorary Physician to St. Mark's Hospital, City-road, vice Dr. Arthur Leared, deceased.

HAYES, R. A., M.D., has been appointed a Physician to Steevens's Hospital, Dublin.

JACOB, J. B., M.B., L.R.C.S.I., has been appointed Medical Officer, Medical Officer of Health, and Public Vaccinator to the Fifth District of Plympton St. Mary Union, vice Govett, resigned.

JOY, F. W., L.R.C.P.Ed. & L.M., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Thetford Urban Sanitary District, at £20 for one year.

LETTIS, T., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Great Yarmouth Hospital.

LILLEY, G. H., M.D., M.R.C.P.Ed., has been appointed Medical Officer for the Ogley Hay District of the Lichfield Union.

LUCAS, H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of the Workhouse of the Huntingdon Union.

M'HARDY, M. Macdonald, F.R.C.S., has been appointed Professor of Ophthalmology to King's College, London, and Ophthalmic Surgeon to King's College Hospital, vice Wells, deceased.

MAYO, A. C., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Great Yarmouth Hospital.

MILBORNE, J. R., M.D., L.R.C.P.L., has been appointed Certifying Factory Surgeon for the District of Chertsey, Surrey.

MOORE, J. N., M.R.C.S.E. & L.M., L.S.A.L., has been appointed Certifying Factory Surgeon for the District of Moreton-in-Marsh, Gloucestershire.

PARISH, F., M.R.C.S., L.R.C.P., L.M., has been appointed House-Surgeon to the West Kent General Hospital, Maidstone, vice Knowles, resigned.

PHILPOT, B. P., L.R.C.S.I., L.A.H.D., has been appointed an Assistant House-Surgeon to the Liverpool Dispensaries.

POLLARD, W., F.R.C.S.E., has been appointed a Consulting Surgeon to the Torbay Hospital and Provident Dispensary, Torquay, on resigning as Surgeon.

ROBINSON, M. K., M.D., has been reappointed Medical Officer of Health for the Broadstairs Urban Sanitary District, at £20 per annum, until the 25th December, 1884.

ROSSITER, G. F., M.B., has been appointed an Honorary Assistant Medical Officer to the Weston-super-Mare Hospital and Dispensary.

SPURGIN, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Blackmore District of the Ongar Union.

TWEEDY, H. J. C., M.D., has been appointed a Physician to Steevens's Hospital, Dublin.

WADE, J. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, &c., for the Lettermore Dispensary District of the Oughterard Union, co. Galway, at £110 per annum and fees, and £12 per annum as Medical Officer of Health, vice Grealy, deceased.

WALLIS, F. M., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Third District of the Battle Union.

WATSON, C. S., M.B., C.M., M.R.C.S., has been elected House-Physician to the Bristol Royal Infirmary, vice Scott, resigned.

WILLIAMS, P. H., L.R.C.P.L., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the District of Windsor.

WOTHERSPOON, T. A., M.D., C.M., has been appointed Certifying Factory Surgeon for the District of Brampton, Cumberland, vice Thom, deceased.

Births, Marriages, and Deaths.

BIRTHS.

BERRY.—On the 2nd inst., at Appleton Cottage, Great George-street, Wigan, the wife of William Berry, M.R.C.S.E., L.R.C.P.Ed., L.R.C.S.Ed., of a son.

CAMERON.—On the 12th inst., at 2, Charlton Villas, Harlesden, N.W., the wife of H. H. Cameron, L.R.C.P.L., M.R.C.S.E., of a daughter.

COLLINGRIDGE.—On the 31st ult., at Selwood, Forest-hill, the wife of William Collingridge, M.B., of a daughter.

COLLINS.—On the 17th inst., the wife of H. A. Collins, Esq., The Chantry, Saxmundham, Suffolk, of a son.

DAVEY.—On the 3rd ult., at Beaufort West, Cape of Good Hope, the wife of Charles James Davey, M.B. (late of Colchester, Essex), of a son.

PARNELL.—On the 15th inst., at St. Norman's, London-road, Forest-hill, S.E., the wife of Gerald Crécy Parnell, M.R.C.S.E., L.S.A.L., of a son.

MARRIAGES.

COLENSO—KERR.—On the 7th ult., at St. Giles's, Oxford, Robert John Colenso, M.B., to Emily Anne, daughter of the late T. C. Kerr, Esq.

GARBETT—SOULBY.—On the 10th inst., at Holy Trinity Church, Hull, Edward Henry Garbett to Henrietta Louisa Ann, only child of Henry Soulby, M.D., and granddaughter of J. P. Bell, M.D., J.P.

DEATHS.

ALLEN.—On the 9th inst., at Welbourn Hall, Grantham, Lincolnshire, Caroline, the wife of Robert Marshall Allen, M.D., Deputy Inspector-General of Hospitals H.M. Army.

CLOUTING.—On the 12th ult., at Thetford, Grace Rebecca, the infant daughter of J. R. Clouting, M.R.C.S.E., aged 6 weeks.

HALL.—On the 4th inst., at Malta, Surgeon-Major A. R. Hall, of dysentery contracted when serving in Afghanistan.

WILLETT.—On the 12th inst., at Brandon, Edith, the wife of Charles V. Willett.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Feb. 19th, 1880.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 13	30·22	W.	38	36	..	48	35	..	Fine
,, 14	29·89	S.	44	41	..	45	35	..	Cloudy
,, 15	29·50	S.E.	45	43	..	47	42	0·05	Raining
,, 16	29·29	S.E.	47	46	..	54	41	0·17	Raining
,, 17	28·91	N.W.	43	42	..	50	42	0·27	Raining
,, 18	29·31	S.W.	47	45	..	55	40	0·03	Raining
,, 19	29·34	S.W.	51	50	..	55	45	0·07	Raining

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Local papers containing reports or news-paragraphs should be marked.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE MEDICAL PROFESSION AS A CALLING.

IT is strictly true that the medical profession is overcrowded, and cannot be regarded as an eligible "calling" for needy men, or indeed for men who are not practically independent of their work as a means of livelihood. The labourer is worthy of his hire, and it is in the last degree desirable that a full and fair tariff of fees should be maintained; but we cannot recommend young men without sufficient private resources to enter the profession. It is because a serious mistake has been too often made in this matter there are in our ranks many hundreds of able but distressed practitioners who contend with eagerness among themselves for appointments of almost any class which seem to offer the means of bare sustenance. The profession labours under great disadvantages resulting from its crowded state and the impecuniosity of its members. One, though not the only, reason why the scale of payments for public services—for example, attendance on the sick poor—is so low will be found in the number of eager applicants for any vacant post, let the emolument be small as it may. Parents and young men of narrow means will do wisely to be warned, and look elsewhere for a vocation which brings adequate rewards. There is not a word of exaggeration in the statements which have been recently made on the subject, and we trust they will have a deterrent effect.

Mr. Harry W. House.—Some of the colonies have Medical Acts; some have not.

R. M. O.—It is not necessary to insert the letter sent us.

A MEDICAL POST-CARD.

To the Editor of THE LANCET.

SIR,—I have received a post-card from the British Medical Temperance Association, announcing that at a meeting shortly to be held one of their members will read a paper "On the Use of Alcohol during the Menstrual Period." It seems to me that it is most objectionable to send announcements such as the following on post-cards:—

"*British Medical Temperance Association.*

"The next quarterly meeting of the Association will be held in the Rooms of the Medical Society of London, 11, Chandos-street, Cavendish-square, London, W., on Thursday, February 12th, 1880, at 4 P.M., when a paper will be read by Dr. C. J. Russell 'On the Medical Profession and Total Abstinence,' and Dr. Norman Kerr will present a communication 'On the Use of Alcohol during the Menstrual Period.'

"Enfield, Middx., Feb. 2nd, 1880." "J. JAMES RIDGE, Hon. Sec.

Surely the Association can afford to pay for envelopes and stamps. If they cannot, then members had better subscribe a shilling each to help to pay for the twelve monthly announcements.—Yours &c.,

London, Feb. 12th, 1880. M.R.C.S

COMPULSORY MEDICAL ATTENDANCE.

IN our impression for the 7th inst., a correspondent asked us if there were any Act of Parliament to compel a medical man to attend professionally any case which he might be called to. To this question we answered "No; but he must exercise judgment in refusing to attend," adding certain reasons why he should do so. A correspondent, under the signature "Advanced Student," writing from Belfast, takes exception to this answer, and says if it (the exercise of judgment, to wit) were "made a rule of practice," it would be "sufficient to disquiet all medical students with the profession either as a means of earning their bread or accumulating wealth, and cause them to pause before assuming the fatal *licence* to practise, which seems rather a command to practise for the remainder of their natural life without the slightest choice of patients," with many other direful things in prospect. Nevertheless, the exercise of judgment in the matter in question has not worked badly hitherto on both sides the Irish Channel, and, as a matter of experience, we should urge its exercise upon our correspondent in his own interest.

Old Salt.—We are unable to supply our correspondent with the information he asks for. Write to the Secretaries of the Companies named.

Mr. George H. Knight.—Registered medical practitioner.

INDIAN MEDICAL SERVICE PENSION RULES.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you kindly allow me, through the medium of THE LANCET, to direct attention to the Indian Medical Service Pension Rules, and to contrast the rates of pension granted under them with those granted to the Army Medical Department.

It may seem incredible, but it is a fact, that it takes an Indian officer twenty-four years to earn a pension of £1 a day, or £365 a year, which an officer in the Army Medical Department, with the advantages of home service, can earn in twenty years. The anomaly of requiring an officer to serve four years longer, to earn a pension in an exhausting tropical climate, than he would have to serve in the home service to earn the same pension, is self-evident; but when I explain how in practice the conditions of Indian service in many cases postpone indefinitely the time when pensions can be obtained, the illiberality and harshness of the Indian Pension Rules will be understood.

The following tables show the rates of pension and the periods after which pensions are obtainable in both services:—

Army Medical Department.

Surgeon-Major after	20 years' service ..	£365	0	0	a year.
"	" 25 " ..	410	12	6	"
"	" 30 " ..	456	5	0	"
Brigade Surgeon	" 20 " ..	501	17	6	"
"	" 30 " ..	547	10	0	"
Deputy Surgeon-General	.. ..	638	0	0	"
Surgeon-General	.. ..	730	0	0	"

Indian Medical Service.

Surgeon-Major after	17 years' service	£220	a year.
"	" 21 "	292	"
"	" 24 "	365	"
Brigade Surgeon	" 27 "	456	"
"	" 30 "	550	"

From the above it will be seen that, in the Indian Service, pensions are calculated by length of service only, and not in any way with reference to rank. The first period for pension in the Indian Service is shorter than in the Army Medical Department; but the service required from an Indian officer to entitle him to £365 a year, the lowest rate of pension in the A.M.D.'s scale, is twenty-four years, twenty-two of which must be spent on duty in India. An Indian officer is entitled to four years' furlough in twenty years' service, and generally requires that amount to recruit his health; yet, strange to say, leave of all kinds in excess of two years in twenty-four, even sick leave granted on account of illness contracted on duty, is not allowed to count as service for pension. As few constitutions can pass for twenty-four years through the ordeals of a tropical climate without requiring change of air to a greater extent than is allowed by this rule, it virtually is, to many, prohibitive of all pensions except the lowest, as every day's leave taken in excess of the sanctioned two years prolongs to the same extent service in India—a serious matter to a declining constitution. As an illustration in point, I may quote a case, not a very exceptional one, in which an officer lost his health on service during the mutiny, and was invalided to England. On his return to India, he found that his health had been so much undermined he was obliged to take more leave during his further service than he had anticipated, and that when he had determined from the broken state of his health to retire, he could not do so, as after over twenty-two years' service, almost nineteen of which had been passed in India, he was only entitled to a pension of £220 a year. He struggled to complete the next period of service, which would have given him a slightly higher pension, one not equal to the lowest in the A.M.D. scale, but he died in the attempt. He held at the time the rank of surgeon-major (senior grade), and his wife received the pension of a lieutenant-colonel's widow, or £225 a year, or £5 more than her husband's services had earned for him in twenty-two and a half years in a climate which caused his death. His widow also received £40 a year for each of her sons, so that the death of her unfortunate husband was, from a pecuniary point of view, an absolute gain to his family of £85 a year. It may, I think, be assumed that in no other service in the world could Pension Rules be found so framed as to make it possible that the death of a husband would be a benefit to his widow and family.

The existing Pension Rules are certainly out of date now, and require revision, not only of the rates of pensions, but of the conditions under which pensions are granted. The former should be calculated with reference to rank as well as length of service, and the latter should be hampered by no such illiberal restrictions as at present place out of reach of most men all but the lowest rates of pension. There is no reason why the Indian Medical Service Rules should be calculated on principles different from those of the A.M.D., or why the disadvantage of exile in a tropical climate should not tend to lessen instead of to increase, as it does at present, the amount of service required for an Indian pension.

Service on the coast of Africa counts double for members of the A.M.D., and for each year's service on the coast a year's leave at home is granted. Why should not consideration somewhat similar, but modified according to circumstances, be shown to officers of the Indian Service, whose service is altogether tropical?

Memorials, frequently addressed to Government on the subject of pensions, have invariably been treated with callous indifference, so much so that they have seldom elicited even a reply. Last year such restrictive orders were issued with reference to memorials as virtually to prohibit their submission. There is, therefore, no other course left to the service but to seek aid from external sources, and it is with the object of doing so that I solicit the favour of your enabling me to give publicity to the facts I have referred to in this letter.

I remain, Sir,

Jan. 1880. ONE IN THE SERVICE.

A NEW MALADY.

ACCORDING to a correspondent of the Russian journal, the *Molva*, a previously unknown and very fatal malady has appeared at Kozlov, in the government of Minsk. The symptoms are described as shivering, succeeded by a violent migraine, accompanied with fever, delirium, and an abundant perspiration. Death follows inevitably. The first symptoms of the malady differ so little from those of an ordinary cold in the head that a fatal issue is not suspected. He describes the case of a boy, sixteen years old, returning home from school at one o'clock P.M., feeling slightly indisposed. He lay down in consequence of a headache from which he suffered becoming insupportable. At the same time he became feverish, and about five o'clock violent delirium supervened. A quarter of an hour afterwards he died. Children and youths have alone as yet been attacked with this disorder.

Mr. W. F. Bennett, (Bath.)—Thanks. The announcement appeared in our journal for Jan. 17th, page 112.

O. W.—Yes.

TOBACCO-SMOKING.

To the Editor of THE LANCET.

SIR,—Possibly my personal experience in the tobacco question may possess some interest.

I was taught to take snuff when at school, at the age of fourteen, by a young South American, a direct descendant of the Incas. I continued the habit for forty-six years, during which time I took about an ounce of snuff daily. During this time I only smoked occasionally. About ten years since the mucous membrane of my nose got tired, and my nostrils were constantly stuffed up; so I gave up snuff, and devoted myself to my pipe, smoking (of a mild mixture) eight ounces in ten days. I prefer shag or returns; but certain remonstrances from my head compelled me to forego them. I never smoke before breakfast, and avoid cigars. I never passed through any introductory period of intolerance in either snuffing or smoking.

Now for my hygienic history. I inherited struma from my father, and deafness from my maternal grandfather. As a boy I had glandular enlargements and general feebleness. At nineteen I went for health sake to South Africa, got well, but was nearly killed by a fall from my horse. I broke a tooth, and the gum grew over it, but it was forgotten. At twenty-six I had neuralgia, which turned out to be an abscess in the left antrum, the whole floor of which necrosed and came away, leaving a free gangway from the antrum to the mouth. While this went on, I had an attack of pneumonia, which ended in sphacelus of the left lung, leaving a large cavity. Then I passed six years in Madeira, and returned to England in fair health. Ten years ago I had pleurisy, with effusion (serous) in the right pleura, and was nearly finished. I have had, I suppose, from first to last, 100 attacks of hæmoptysis, varying in quantity from one drachm to a pint. I have had no teeth for fifteen years of my own, and only artificial ones in the lower jaw for the sake of articulation; but my digestion is perfect, and I can eat anything save boiled mutton! I became deaf at the same age as my grandfather, who abhorred tobacco. Of course a man is no judge of his own mental powers; but I do a great amount of work as a county magistrate, and at sixty-eight (I am now seventy) seeking to force my mind to occupation, after very many trials, I began to learn German, and I believe I am now a competent German scholar. For two years I have entirely abstained from all forms of alcohol, and am more comfortable without it. I never used it except moderately.

Yours faithfully,

January, 1880. M.R.C.P. Lond.

MEDICAL MISSIONS IN CENTRAL AFRICA.

THE following extract from the journal of Dr. Southon, stationed about thirty miles south of Unyanyembe, at a place named Simbo, is of some interest:—"Dr. Baxter told me that King Mirambo had a tumour on his left arm, which he was very anxious to have removed, so I was prepared to hear about it. I found it, on examination, a tumour, about the size of a walnut, on the forearm, and in a line with the median nerve, about its middle third. Being superficial, I diagnosed a sebaceous cyst, and accordingly did a very simple operation in taking it out; but the elaborate antiseptic precautions, the spray and the gauze, &c., made the whole thing *appear* very wonderful. Mirambo would not take chloroform, and I must say he excited my warmest admiration by the stoical way he endured the dissecting out. He did not flinch a bit, but conversed all the while, as if he were an onlooker, and not the subject under the knife. He was pleased to find that he suffered little or no pain, after the first soreness had passed away, and attributed it to the strong 'dowa'—i.e., medicine,—which he called the spray."

F.R.C.S.—We understand that the decision of the Jacksonian Committee for the collegial triennial prize will be made known next week. Only one essay was sent in. The subject for the Jacksonian prize is not yet decided on.

O'D.—Address G. Brown, Esq., Colebrooke-row, Islington, N.

OXYURIS VERMICULARIS.

To the Editor of THE LANCET.

SIR,—Your correspondent "Helminta" has possibly failed in curing the case referred to by acting on the supposition which is conveyed in many text-books, that ascarides inhabit only the rectum and quite the lower part of the colon, and can easily be washed out by any injection strong enough to kill them, and as they are easily killed, if these facts were correct, it would be very easy to get rid of them. But I think it is certain that if fully-developed ascarides only exist near the rectum, they are often generated higher up; for I have seen daily copious injections carried well up the colon with an elastic catheter, and bringing away, dead, all the worms probably that were in the lower part of the bowel, and yet this has been followed by daily recurrence of fresh quantities of worms in great numbers. I believe in such cases the whole of the large intestine, and perhaps even part of the small, must be infested with worms. I have found the following plan successful in obstinate cases:—Having interdicted absolutely all raw or partially cooked fruit and vegetables of every description, as well as sweets and preserves, such as figs, raisins, &c., let the patient have daily as large an injection as can be comfortably retained; a good injection being a quart or more of infusion of quassia, lukewarm, and to which one drachm of carbolic acid may be added with advantage. At the same time to take three or four drachms of powdered charcoal every day, and five or six grains of santonin dissolved in half an ounce of castor oil every night; after a few days substituting for this treatment a glass of Freidrichshall water every morning fasting, and a mixture containing tincture of iron, tincture of nux vomica, and infusion of quassia three times a day. This will improve the condition of the intestine, and diminish the mucus, which is generally present in these cases, and, if raw fruit is avoided, the worms will probably not return. A drachm of carbolic acid to a pint of tepid water is a convenient and efficient injection, which may be used daily with advantage for some little time. I may mention that one obstinate case I knew of only yielded to turpentine in large doses.

Yours &c.,

Feb. 14th, 1880. R. H. C.

To the Editor of THE LANCET.

SIR,—I would suggest to "Helminta" (in case it has not formed part of his treatment) the old plan of the internal administration of chloride of sodium, either the amount consumed at meals to be augmented, or, what is preferable, given in half-drachm doses three times a day, disguised by some colouring agent. I have seen it tried in many cases with satisfactory results. It probably induces a healthier state of the intestinal mucous membrane. Yours faithfully,

Hull, Feb. 16th, 1880. ARTHUR MANNERS, M.R.C.S.

To the Editor of THE LANCET.

SIR,—If "Helminta" has not already tried santonin in his case of oxyuris vermicularis, he will find that his patient will derive great benefit from the use of suppositories of this drug. The santonin in this form of administration is in immediate contact with the worm, and rarely fails to destroy it. A suppository made of cocoa-butter, and containing three grains of santonin, should be introduced nightly at bedtime.

Yours &c.,

Feb. 16th, 1880. R. R.

R. H. M.—Arsenical wall-papers are always to some extent a source of danger, and should be avoided. Some papers, however, are very much worse than others, both as to the quantity of arsenic they contain and the way in which the colour is applied. It is believed that paper hung on damp walls is liable to give out arsenical fumes; but friction is probably the most common cause of mischief. We have known the green paper of a nursery to be actually rubbed white by the friction against it of a child's crib!

Dr. Hunt, (Brooklyn.)—We must decline.

METHODS OF LECTURING.

THERE are various ways of conveying instruction to student minds, and one of them is by means of lectures. There are, however, different modes of lecturing, yet all, to be successful, must be arranged on some intelligible system. In other words, there must be a plan, the simpler the better, so long as it be logical. The most extraordinary method perhaps ever followed was that adopted by Professor Thomas D. Mitchell, at Jefferson Medical College, "who for several years after the loss of Professor Huston taught Therapeutics and Materia Medica in alphabetical order; certainly an unphilosophical arrangement, because it admitted of but little therapeutic classification of remedies, and gave no clue to the student as to the choice of an article from a group of similar therapeutic efficacy." The writer of an article in the "College and Clinical Record" (from which we quote) well remembers listening to a lecture delivered by Professor Mitchell, which included the following diversified programme: Fprrum, Fennel, Fish, and Flannel.

Emigrant.—We cannot advise in the matter.

QUARANTINE.

To the Editor of THE LANCET.

SIR,—I have had so many applications, particularly from members of the medical profession, for copies of the "International Rules of Quarantine," which I drafted and submitted to the Association for the Reform and Codification of the Law of Nations, last August, that I should feel obliged if you would allow me to mention through your columns that I have distributed all the copies I had printed. I am contemplating a new edition, but in the meantime a reprint of these Rules will be found in the last October number of *Colburn's New Magazine*.

I am, Sir, yours faithfully,

Middle Temple-lane, London, Feb. 10th, 1880. SHERSTON BAKER.

BLIND AND DEAF-MUTE CHILDREN.

MR. WHEELHOUSE has introduced a Bill into Parliament to provide more effectual means for the education of blind and deaf-mute children. This Bill would authorise boards of guardians, on the application of parents not having the means for special training of children so afflicted, or in the case of deaf-mutes or the blind deserted or orphans, to send them to school. It would also give justices power to provide suitable schools out of the county rate.

Mrs. Heygate may obtain the information desired from a standard work on Skin Diseases, such as that of Dr. Tilbury Fox.

CHILBLAINS.

To the Editor of THE LANCET.

SIR,—In your number of Dec. 6th there is an inquiry as to a good remedy for chilblains, and, in reply, you mention oil of cajeput, and refer to receipts given in THE LANCET of 1875. I have not this year's volumes with me, and so may seem guilty of plagiarism in giving the following formula as new:—Oil of cajeput, strong liquor ammonia, of each one drachm; compound soap liniment, three ounces. This, if not a perfect cure, has at least so kept the enemy at bay that discomfort is minimised. At this Himalayan station these minor worries are very common.

Yours &c.,

Dalhousie, Jan. 5th, 1880. G. C. G.

J. P. V., (Bruxelles.)—Dr. Wallich's application of the microphone is not, we believe, yet completed, but the inquiry might be addressed to him personally.

J. M.K. (Greenock) would find it the wisest course to consult a qualified medical practitioner.

Mr. W. H. Harris.—Humphry on the Human Skeleton, or Morris on the Anatomy of the Joints.

J. M.—Essays must be sent in on or before June 30th, 1880. The Society's rooms are in King's College, London.

L.R.C.P.—The charge is most reasonable, and we should say that the father is liable.

HELMINTHOLOGY.

To the Editor of THE LANCET.

SIR,—Has any observer ever measured on the body of the nematoid itself, and so as to be able to state with millimetric exactness the varying lengths of any one filaria sanguinis hominis, as it is seen, according to Lewis, occupying alternately, one moment, the whole, and the next only a part, say, less than one-half of its enclosing sheath? If no such variations in the length of the filaria have been or are to be observed, then I submit that, from the very nature of the case, the appearance spoken of as a sheath cannot, in reality, be a sheath.

Yours &c.,

Bahia, Brazil, Jan. 17th, 1880. JOHN L. PATERSON, M.D.

Mr. Julius Cæsar.—There is nothing remarkable in the vomiting of a "round worm." The point of interest lies in the vomiting of ascarides, which have been commonly supposed to inhabit the large intestine.

F.R.C.P., (Liverpool.)—Yes. Professor James Aitken Meigs died of pyæmia at his residence in Philadelphia on the 9th November, 1879, aged fifty.

ERRATUM.—In the concluding part of Dr. Maclaren's paper on "The Advances in Surgery during the past Twenty Years" (p. 240), the amputations in the Cumberland Infirmary during 1877-78 were stated as 76 in number, whereas they should have been given as 49. Apparently the mistake arose from including the amputations among the out-patients with those among the in-patients.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Barnes, London; Mr. H. Smith, London; Dr. Julius Pollock, London; Mr. Teevan, London; Dr. Squire, London; Mr. Gamgee, Birmingham; Dr. Fairweather, Pocklington; Mr. George, Dorchester; Dr. Caskie, London; Mr. Horder, Crickherbtown; Mr. A. L. Fernandez, London; Mr. Vacher, Birkenhead; Mr. Silke, Edinburgh; Dr. Gordon, Dublin; Mr. Egan, Fulham; Mrs. Heygate, Leominster; Dr. Tatham, Salford; Dr. G. de F. Morris, Eastham; Mr. Leared, London; Dr. Haddon, Manchester; Dr. Braidwood, Liverpool; Mr. Weekes, Melksham; Mr. Harris, London; Mr. Clarke, London; Mr. Woodhouse, Fulham; Mr. Thomas, Plymouth; Mr. Denham, Southsea; Mr. Trenerry, Bristol; Dr. Bacot, Dorset; Dr. Charles, Cork; Mr. Innes, Brighton; Mr. Knight, Courthope; Dr. Plowright, King's Lynn; Mr. Newstead, London; Mr. Croxton, London; Mr. North, Tewkesbury; Mr. Ouvry, Leighton; Mr. Chapman, London; Mr. Mercier, London; Mr. Palmer, London; Mr. Finn, London; Mr. Jeaffreson, Newcastle-on-Tyne; Dr. Harding; Dr. Sinclair, Dundee; Dr. Farquharson, Aboyne; Mr. Hall, Liverpool; Mr. Spry, Callington; Mr. Abraham, Liverpool; Mr. Settle, Stockton; Dr. Gamgee, Manchester; Mr. Wood, London; Mr. Lownds, Hatfield Broad Oak; Mr. Rundle, Crediton; Mr. Reeves, Birmingham; Mr. Nursey, Sunderland; Mr. J. B. Jacob; Mr. Beck, Northampton; Mr. Delamotte, Staines; Mr. Parr, Clapham; Mr. Bridges, London; Mr. Bennett, Bath; Mrs. Swinney, Bournemouth; Mr. Grundy, Royston; Mr. Lilly; Mr. Phillips, London; Mr. Barnard, Edinburgh; Mr. Ingpen, Putney; Dr. Shorthouse, Croydon; Mr. Taylor, Newbury; Mr. Cullimore, London; Mr. E. Lopez; Mr. Ketts, Sunderland; Mr. Rossiter, Weston-super-Mare; Dr. G. Budd, jun.; Dr. Bell, Glasgow; Dr. D. Powell, London; Mr. Osborn, London; Mr. J. M'Cormac, Mourne View; Mr. Manners, Hull; Mr. Holmes, Maidstone; Mr. Andrews, Southport; Dr. Creighton, Cambridge; Surgeon-Major Evatt; Mr. Julius Cæsar; Mr. Stock, Folkestone; Sir A. H. Elton, Bart., Clevedon; Mr. Wilson; Mr. Stokes, London; Dr. Arlidge, Stoke-upon-Trent; Mr. Prideaux, Wellington; Mr. Beer, Southampton; Dr. Cheadle, London; Mr. Turner, Rutland; Mr. A. Clarke, Longton; Mr. Dalrymple, Leicester; Mr. Whitford, London; Mr. M'Kenzie, London; Mr. Johnson, Nottingham; Mr. R. Freeman, London; Messrs. Sampson and Co., Liverpool; Mr. Vatchell, Cardiff; Mr. Burgess, Bristol; Messrs. Anderson and Co., Glasgow; Dr. Jerrity, Bristol; Mr. Chilcot, Bristol; Dr. Foster, Birmingham; Messrs. Parsons and Co., Manchester; Mr. Quennell; L. C., Leigh; W. W. E., Llanfair; J. M'K., Greenock; Malar; A Constant Subscriber; &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Buzzard, London; Dr. M'Lintock, Church Stretton; Mr. Blount; Mr. Bolton, Horncastle; Dr. Cameron, Harlsden; Mr. Williamson, Lincoln; Mr. Legge, Aberdeen; Dr. Warner, Peterborough; Mr. Kemp, Castleford; Messrs. J. and H. Grace, Bristol; Mr. Whitely, Scorrier; Mr. Jenkyns, Wansford; Mr. Sargeant, London; Mr. Le Fraine, Aylesbury; Messrs. Swan and Procter, Newcastle-on-Tyne; Dr. O'Reilly; Mr. Gray, Rugeley; Dr. Rae, Blackburn; Mr. Simpson, Oldham; Mr. Clouting, Thetford; Mr. Allan, Belper; Mr. Kessen, Hull; Mr. White, Wigan; Mr. Trubshaw, Mold; Mr. Davenport, London; Dr. Dowse, London; Mr. Atkey, Chichester; Mr. Allan, Alfreton; Dr. Wallace, Cleckheaton; M.D., Sheffield; K.; Veritas, Brecon; Alpha, Sheffield; C. N.; F. G., Manchester; W. G., Stratford; S. W., Birmingham; D. K.; A. B., York; J. C.; Gamma, Dublin; H. S.; Barts; M.D.; R. and S., Stratford; M.R.C.S.; W. M. S., Tunbridge Wells; L. M. N.; Surgeon; Anthrax, Brighton; Gamma, Manchester; Perseverance; Camillo; S. M., Stow-on-the-Wold; P.; Delta, Manchester; Doctor, Eastham; Spes, Spennymoor; Chirurgus; &c.

Manchester Guardian, Liverpool Daily Post, Glasgow Herald, Leeds Mercury, Bristol Mercury, Madras Mail, Times of India, Chelmsford Chronicle, Surrey County Advertiser, Largs Mirror, North Staffordshire Christian Journal, &c., have been received.

TERMS FOR ADVERTISING IN THE LANCET.

Seven Lines (seventy words) and under ..	£0	4	6
Every additional Line	0	0	6
(Each Line averages eleven words.)			
Front Page .. .. per Line	0	1	0
Quarter Page	1	10	0
Half a Page	2	15	0
An entire Page	5	5	0
Advertisement Index .. .. per Line	0	0	6

Terms for Serial Insertions may be obtained on application to the Publisher.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—
M. BERTHIER, 104, Boulevard St. Germain, Paris.

Medical Diary for the ensuing Week.

Monday, Feb. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Parker, "On the Structure and Functions of the Vertebrate Skeleton."
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Thorowgood, "On Suppressed Gout."—Mr. Corfield: "Leaves from a Sanitary Note-book." Mr. Dewar, "On a Case of Jaundice."

Tuesday, Feb. 24.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Schäfer, "On the Physiology of Muscle."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. Vandyke Carter: "Experimental Pathology of Spirillum Fever."—Dr. Alfred Sangster: "Non-glandular Theory of Origin of Molluscum Contagiosum."

Wednesday, Feb. 25.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Parker, "On the Structure and Functions of the Vertebrate Skeleton."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lectures: Dr. Gowers, "On Epilepsy."
HUNTERIAN SOCIETY.—8 P.M. Dr. Stephen Mackenzie will show a Case of Urticaria Pigmentosa (living subject), and read a paper "On Annular Stricture of the Intestine."

Thursday, Feb. 26.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Dewar, "On recent Chemical Progress."

Friday, Feb. 27.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Parker, "On the Structure and Functions of the Vertebrate Skeleton."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lectures: Dr. Gowers, "On Epilepsy."
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Dr. T. Spencer Cobbold, "On Human and Canine Filariæ."—Dr. Sylvester Marsh, jun., "On Bleaching and Washing Microscopical Sections."
ROYAL INSTITUTION.—8 P.M. Evening Meeting.—9 P.M. Mr. F. J. Bramwell: "Sequel to the *Thunderer* Gun Explosion."
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Teevan, "On a Case of Retention of Urine from Impacted Urethral Calculus, relieved by pushing the Stone back into the Bladder, and Crushing it."—Dr. Buzzard, "On a Case of Paraplegia from Pott's Disease, treated by Sayre's Splint; Intestinal Obstruction; Death from a Kink in the Duodenum." "On a Case of rapid and almost universal Paralysis, involving the four Extremities, both sides of the Face, Respiration, and Deglutition; Recovery."—Dr. Sangster, "On a Case of Molluscum Fibrosum."—Dr. Greenhow, "On a Case of Typhoid Fever with Acute Nephritis and Profuse Hæmaturia."

Saturday, Feb. 28.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Saintsbury, "On Dryden and his Period."

TERMS OF SUBSCRIPTION TO THE LANCET.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year.....£1 12 6 | Six Months £0 16 3

TO THE COLONIES AND INDIA.

One Year £1 14 8

Post Office Orders in payment should be addressed to JOHN CROFT, THE LANCET Office 423, Strand, London, and made payable to him at the Post Office, Charing-cross.